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ALISON SPENCER BSc Hons

**GENDER EFFECTS AND AGGRESSIVE CHALLENGING
BEHAVIOUR IN PEOPLE WITH LEARNING DISABILITIES.**

**A thesis submitted in partial fulfilment of the requirements of the Open
University for the degree of Doctor of Clinical Psychology**

SEPTEMBER 1999

**SALOMONS
CANTERBURY CHRIST CHURCH UNIVERSITY COLLEGE**

16,949 words

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ABSTRACT

Background and Aims

Recent research has highlighted the importance of the causal attributions and emotional reactions of staff in determining their responses to challenging behaviour. Although it has been suggested that men and women may differ in their emotional reactions and that female clients may receive more intrusive interventions, services remain gender-blind.

The aims of this research were to investigate any gender differences in the perceptions and responses of staff with regard to aggressive challenging behaviour and to determine whether the gender of the client had any impact on their responses.

Design and Participants

A between subject factorial design was used where the factors were the gender of the participants and the gender of the vignettes. Sixty-four male participants and sixty-four female participants were recruited from residential homes, day centres and a diploma course. Half of the male and female participants received a male vignette and half received a female vignette.

Measures

The questionnaire consisted of measures of causal attributions, intervention behaviour and emotional reactions to challenging behaviour and a short section on demographic details.

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1. INTRODUCTION

1.1 Definitions and Problems Caused by Challenging Behaviours

Challenging behaviour is probably the most researched area in the field of learning disabilities (Hastings, 1997a). The term originated in North America and is now used in place of other labels such as problem, aberrant, dysfunctional and maladaptive behaviour (Emerson, 1995). Rather than perceiving inappropriate behaviours as being located within individuals, the use of this term places an increased focus on services and how they might respond to such behaviours (Jones & Eayrs, 1993). Although many formal definitions have been proposed, one of the most commonly used is that of Emerson (1995). He states that challenging behaviour typically refers to behaviour of

‘...such an intensity, frequency or duration that the physical safety of the person or others is likely to be placed in serious jeopardy, or behaviour which is likely to seriously limit use of, or result in the person being denied access to, ordinary community facilities’ (Emerson, 1995, p.4)¹.

There is much variance in the form that challenging behaviour takes (i.e. its topography) and the underlying psychological/biological processes although broadly speaking, the term usually encompasses a range of aggressive, self injurious and stereotyped behaviours (Emerson, 1998). However, identification has strong subjective elements so that a

¹ Amended version of a previous definition by Emerson, Cummings, Barrett, Hughes, McCool & Toogood (1988)

person's behaviour may be considered challenging if it is seen by others as being socially unacceptable and evokes a strong negative emotional response such as fear, embarrassment and despair (Clements, 1997). Challenging behaviours can therefore be described as a social construction in that they are behaviours which violate social rules (Emerson, 1998).

Studies of the prevalence of challenging behaviour vary widely due to different definitions used in research, methods of identification and sampling strategies involved (Emerson 1995). However, it is estimated that between 10% and 15% of individuals within learning disability services pose a significant management problem, or would do if specific interventions were not in place (Emerson, 1998). Challenging behaviours also appear to be more prevalent in certain risk categories which include; boys and men, individuals with severe learning disabilities, those between the ages of 15 to 35 years, the presence of additional sensory, mobility or communication difficulties and in people with certain specific syndromes (Emerson, 1998). Evidence also suggests that challenging behaviours develop in childhood and are remarkably persistent over time (Emerson, 1995).

It is perhaps not surprising that challenging behaviour can have a deleterious effect on both those who engage in the behaviour and those who act as caregivers (Hastings, 1997a). For example, clients who are challenging are at greater risk of being abused (Rusch, Hall & Griffin, 1986) and are more likely to be placed into residential care (Sherman, 1988). Furthermore, aggression and self injury can result in extensive harm

and those who display challenging behaviours are seen more negatively by care staff compared to those who do not (Jones, Wint & Ellis, 1990). Research also suggests that challenging behaviour is one of the most significant sources of stress for care staff (Hatton, Brown, Caine & Emerson, 1995). Bromley & Emerson (1995) suggest this is due to the “daily grind” of caring, the unpredictability of the behaviour, difficulty in understanding the behaviour and the seeming lack of any effective solutions.

1.2 The social basis of challenging behaviour

The dominant approach to understanding and treating challenging behaviour is based on the behavioural model. Challenging behaviour is seen as both functional and adaptive and enables an individual to exercise some control over their world (Emerson, 1998). Such behaviours are thought to be shaped and maintained by environmental consequences, which may be either positive (such as the attention of others or the attainment of tangibles such as food) or negative (such as an escape from an imposed demand) (Hastings & Remington, 1994a). Internal consequences, which again can be positive or negative, may also play a role in maintaining some challenging behaviour (e.g. β -Endorphin released as a response to self-injury) (Emerson, 1998). In support of the behavioural model, Derby, Wacker, Sasso, Steege, Northup, Cigrand, & Asmus (1992) used analogue assessments to analyse the challenging behaviour of 79 clients and found that 72% of these behaviours were maintained by attention or escape.

Research has also emphasised the social nature of challenging behaviour, in that challenging individuals both affect and are affected by the actions of others. For example, care staff have successfully carried out interventions to reduce challenging behaviours (Bird, Dore, Moniz & Robinson, 1989) and in experiments, the actions of adults can be predicted from prior knowledge of the function of challenging behaviours (Carr, Taylor & Robinson, 1991). Consequently, the social environment in which challenging behaviour occurs is of central importance (Hastings & Remington, 1995).

Unfortunately, research which has focused specifically on client-staff interaction has revealed some worrying findings. For example, it has been found that clients typically spend less than 10% of their time in contact with staff (Cullen, Burton, Watts & Thomas, 1983) and although some studies suggest this has improved following the move to community services, others have questioned the maintenance of such improvements (Hastings & Remington, 1994a). Furthermore, when the nature of the interactions between staff and clients are considered in more detail, they often appear to be of poor quality. Such interactions are often very brief (Moore & Grant, 1976), consisting of comments or instructions rather than social exchanges (Paton & Stirling, 1974) and tend to be neutral regardless of the actions of clients (Beail, 1985). In addition, Hile & Walbran (1991) found that only 1.8% of all staff time was spent teaching clients new skills. The limited amount of social contact and its poor quality may be instrumental in the development and maintenance of challenging behaviours. Clients may display either unusual or damaging behaviours in order to secure as much staff attention as possible, which then acts as a powerful reinforcer (Hastings & Remington, 1994a). In support of

this hypothesis, Emerson, Beasley, Offord & Mansell (1992) found that severely challenging individuals received more staff attention than those who were not challenging, even when the disruptions arising from incidents were discounted. Alternatively, clients may adapt to the long periods of time they are left on their own, and may develop behaviours which have a self-stimulatory function (Hastings & Remington, 1994a). Finally, as clients are unlikely to be taught functional alternatives during their brief contact with staff, challenging behaviours may be the only way they have of communicating with others (Hastings & Remington, 1994a). Given these findings, the behavioural analysis of challenging behaviour has moved away from focusing solely on a clients' behaviour to incorporating the wider physical and social environment in which the client lives (Hastings & Remington, 1994b).

1.3 Research into Staff Intervention Behaviour

1.3.1 The importance of staff responses to challenging behaviour

In view of this background, a growing area of interest in the learning disability field is the intervention behaviour of staff in response to challenging behaviour. A number of observational studies have been carried out and have yielded some important findings. They suggest that staff do not respond to the majority of client behaviours but sometimes may 'encourage' and 'discourage' both appropriate and inappropriate behaviours (Hastings, 1996). As such, staff may be reinforcing challenging behaviour according to a low rate schedule (Hastings, 1996) and behaviour that is established in this way is hard to

extinguish (Ferster & Skinner, 1957). Furthermore, socially acceptable behaviours that serve the same function as challenging behaviours are unlikely to evoke a sufficient response from staff (Hastings, 1996). In addition, staff may be more likely to respond to more intense challenging behaviours, such as in a crisis situation so that these damaging behaviours become differentially reinforced (Hastings, Remington & Hopper, 1995). Therefore, the way in which staff respond to challenging behaviour is critical.

1.3.2 The findings of self report studies on staff intervention behaviour

A number of other studies have used self-report methodology where staff are asked what strategies they use in response to challenging behaviour. One such study involving 236 institutions in the USA, found that staff reported 'doing nothing' only 2% of the time (Hill & Bruininks, 1984; Bruininks, Hill & Morreau, 1988). Their most popular response was to verbally respond to the challenging behaviour (e.g. ask the client to stop), then physically respond (including restraint), then ignore the behaviour and finally, ask other members of staff to help. The researchers developed a hierarchy of responses to illustrate increased staff involvement; Nothing → Verbal → Ignore → Physical → Call in Others. Staff reported using higher level responses for aggression and self injury rather than property damage or unusual / disruptive behaviour. Intagliata, Rinck & Calkins (1986) used the same hierarchy and found that the highest levels of intervention were reserved for violent, destructive and withdrawn behaviours.

Bromley & Emerson (1993) carried out a similar study based on 70 children and adults with challenging behaviour in the north of England. They found that staff typically used distraction and seclusion to manage aggressive behaviours and distraction and physical restraint in response to both self injurious and destructive behaviours.

1.3.3 The distinction between short and long term intervention behaviour

More recently, Hastings (1996) used a fictional description of aggressive, self injurious and stereotypic challenging behaviour and asked 109 institutional care staff to report their likely intervention behaviour. Their responses were coded according to immediate intervention strategies and explanations and longer term intervention strategies and explanations. The aim of the study was to further investigate staff responses to different topographies of challenging behaviour, to determine staff perceptions of their longer term intervention strategies and to try to gain some insight as to why staff act in the ways that they do.

Hastings (1996) found that staff tended to report using immediate strategies that were potentially counter-habilitative for many individuals with learning disabilities, depending on the function of their behaviour. For example, 67.5% said that they would deal with stereotypy by using distraction, 65.7% said they would deal with aggression by moving the client or others and 41.2% said they would deal with self injury by using restraint. Hence the topography of the challenging behaviour appeared to have an effect on the immediate intervention behaviour of staff.

The explanations that staff gave for their immediate responses tended to reflect the practical necessities of the situation, for example, preventing harm or injuries and distracting and diverting the client's attention. Hastings (1996) pointed out that although the interventions described by staff were based on sensible short term considerations, many could result in the maintenance of challenging behaviours. The immediate concerns of staff were therefore different to those of psychologists who instead tend to be interested in the longer term implications of staff actions.

Interestingly, the reported long term interventions and explanations that were given by staff were much more consistent with the advice of many professionals. The importance of a systematic analysis, the need for a consistent treatment plan and the role of the environment were all emphasised. In particular, it was seen as particularly important that the causes of aggressive behaviour were investigated. Hastings (1996) concluded that rather than lacking the appropriate intervention knowledge, staff were more influenced by the demands of the immediate situation when responding to challenging behaviour.

1.3.4 A possible mechanism - the aversive nature of challenging behaviour

The research of Hastings (1996) suggests that the reported immediate interventions of staff, although initially successful, may in the long term contribute to the maintenance of challenging behaviour. It is therefore important to consider why staff might respond inappropriately in the short term. One hypothesis is that the actions of staff are influenced

by the aversive nature of challenging behaviour. As Mitchell & Hastings (1998) explain, the challenging behaviour of the client and the response of the staff member is closely intertwined. For example, a client may self injure when demands are made upon them (antecedent for the self injury) and staff may intervene by removing the demands (consequences for the self injury). From the staff member's perspective, when they witness the self injury (antecedent for staff behaviour) they intervene to remove the demands so that the self injury stops (consequences for staff behaviour). In this sense, staff actions and challenging behaviour are seen as a dynamic behavioural system where staff react in certain ways because they are engaging in escape or avoidance behaviour. The challenging behaviour is experienced as aversive by staff and their intervention successfully results in the short term removal of the event (Mitchell & Hastings, 1998). However, in the long term, such strategies will result in the maintenance of challenging behaviour.

Staff intervention behaviour is therefore seen as being under the control of contingencies relating to the aversive nature of challenging behaviour (Hastings & Remington, 1994b). This hypothesis is supported by self report research which shows that staff experience various negative emotions in response to challenging behaviour (Bromley & Emerson, 1995). Furthermore, some forms of challenging behaviour, especially those that involve aggression or self-injury may be threatening enough to trigger immediate and nonreflective action from staff members. In such a case, the behaviour of the client acts as a powerful "setting event" (Wahler & Fox, 1981) or establishing operation (Michael, 1982) for the escape and avoidance behaviour of staff (Hastings & Remington, 1994b).

An observational study by Hall & Oliver (1992) confirmed that the self injury of a man with learning disabilities acted as an establishing operation for the attention of staff. Staff attention was low before and after episodes of self injury but increased dramatically during the episode. Their intervention behaviour (increased social contact) was negatively reinforced by the cessation of his challenging behaviour. In the same way, his self injurious behaviour was positively reinforced by their attention, thus establishing a vicious circle.

This model might also help to explain another concern within the learning disability field. It has been noted that there is often a discrepancy between the success of the behavioural interventions reported in journals and those that are carried out in applied settings. As Hastings & Remington (1994a) note, this may be due to a lack of resources or the fact that behavioural guidelines are often not available. However, on other occasions, behavioural programs are simply not followed by staff. A possible reason is that challenging behaviour is so aversive that staff prefer a short term solution regardless of any long term benefits that may arise, especially if the program gives rise to an extinction burst (Hastings & Remington, 1994b). Furthermore, responding to the immediate "needs" of clients may be a natural response for staff so that behavioural programs which focus on the long term implications may oppose staff views about the best thing to do (Hastings, Remington & Hopper, 1995).

1.4 Research into the Emotional Reactions of Staff

Given that evidence suggests challenging behaviour is aversive to staff, research into their emotional reactions has become increasingly important. For a start, staff emotions may play a pivotal role in determining their intervention responses and may also explain why challenging behaviour is considered to be a significant source of stress (Mitchell & Hastings, 1998).

Little research has been carried out in this area. However, Hastings (1993) interviewed 19 care staff who reported feeling anger, fear, annoyance, anxiety and upset in response to challenging behaviour. Over half of these individuals claimed that their emotions affected their responses to clients. More recently, Mitchell & Hastings (1998) devised a rating scale to measure the emotional reactions of staff to aggressive behaviour. Eighty three staff completed the questionnaire which consisted of 18 items arranged on a four point likert scale. The items were based on previous self report research and other literature and were essentially negative in nature. Factor analysis and further item analysis were carried out and revealed two sub-scales; depression / anger and fear / anxiety. Of particular interest was the finding that men scored significantly higher on the depression / anger scale and women tended to score higher on the fear / anxiety scale (as shown by a significant trend). Mitchell & Hastings (1998) recommended further research into these gender differences to develop our understanding of staff responses to challenging behaviour.

1.5 Research into Causal Attributions

Alongside the research into staff intervention behaviour and emotional reactions, there has been a growing interest in staff beliefs about the causes of challenging behaviour, i.e. their causal attributions. Attribution theory (Heider, 1958; Kelley, 1973) refers to the tendency of individuals to seek explanations for the events they observe or experience, in order to gain a feeling of control. Over the last thirty years, this theory has been applied to a variety of psychological phenomena (Fenwick, 1995) and is now being used in the learning disability field. Of particular importance is the possibility that the attributions of staff about the causes of challenging behaviour will in some way influence their intervention responses, although this has not yet been tested explicitly. However, it is known from the field of social psychology that that people's beliefs are relatively good predictors of their behaviour (Ajzen & Fishbein, 1977).

1.5.1 Research findings on the causal attributions of staff

A number of studies have been carried out using different methodologies, to investigate the causal attributions of direct care staff. Bromley & Emerson (1995) asked 70 staff to report possible reasons for a known clients' challenging behaviour. The five most frequent responses were: internal psychological state or mood, past environment, current environment, self stimulation and a form of communication/control. A study by Berryman, Evans & Kalbag (1994) used questionnaire vignettes of fictitious people and asked 83 staff open ended questions about their causal attributions. They found that social

reinforcement, emotions, task/environment, communication, medical/pain and intrinsic reinforcement were most regularly cited. Hastings (1995) conducted semi-structured interviews with 19 members of staff and found that the most frequently described attributions for the challenging behaviour of their clients were; social reinforcement, communication/expression, physical environment and emotional states. Staff responses in this study were then used by Hastings, Remington & Hopper (1995) along with other causal attributions found in the research literature, to devise a 25 item likert scale. This was presented to 148 institution staff along with vignettes describing a fictitious persons challenging behaviour. They found that staff causal beliefs could be accounted for by a seven factor structure; client needs, stimulation, social factors, biological factors, personal and environmental factors, environmental elicitation and natural factors.

More recently, this questionnaire was further developed by Hastings (1997b) to produce the Challenging Behaviour Attributions Scale (CHABA). Two vignettes were used to describe either aggressive or stereotypic behaviours and the questionnaire yielded 5 factors; learned behaviour, biomedical, emotional, physical environment and stimulation. Ninety care staff participated in the research and Hastings (1997b) found that behavioural processes (especially positive reinforcement), emotional factors and stimulatory hypothesis were seen as being the most relevant causal factors. However, correlations between all the sub scales were moderate suggesting that staff saw a range of social, emotional, environmental and biomedical factors as relevant in understanding challenging behaviour.

These studies show that despite using different methodologies, a reasonably consistent pattern emerges to describe staff causal attributions. Social, emotional and physical environment factors are more often cited and organic/medical factors are less often described. In general, attributions of staff seem to fit with the prevailing literature (Hastings, 1997a). However, despite the fact that the causal attributions of staff appear to reflect the contemporary behavioural models, these beliefs are not used to guide the most appropriate response from a psychological perspective (Hastings, Remington & Hopper, 1995). Instead, it would appear that staff tend to address the immediate needs of clients, thus reinforcing their challenging behaviour, rather than intervening in such a way that would lead to its extinction in the long term.

1.6 Possible Explanatory Models of the Factors which Determine Staff Behaviour

A possible explanatory model which links staff attributions with their emotional reactions and responses to challenging behaviour, is Weiner's attributional model of helping behaviour (Weiner, 1980, 1986). This model proposes that attributions regarding the causes of behaviour (such as whether it is under the person's control) determine emotional reactions (such as anger or sympathy) which then determine the likelihood of help being offered. Thus there is an attribution-affect-action ordering.

Dagnan, Trower & Smith (1998) tested the application of this model to staff reactions to challenging behaviour. They found a significant correlation between the attribution of

controllability, negative emotion, a lower level of optimism and a reduced willingness to offer help. Attributions and emotions were therefore shown to be important in determining staff intervention behaviour. The findings also suggested that if staff believed the client to be responsible for their challenging behaviour, the client was blamed and evaluated negatively, both as a person and for their behaviour. Furthermore, age also appeared to be related to the attributional style and emotional responses of staff. Dagnan, Trower & Smith (1998) are planning further research to look at the impact of other variables such as gender and the nature of the challenging behaviour and disability. For example, as Fenwick (1995) suggests, staff may be more likely to perceive individuals with mild learning disabilities as having more control over their challenging behaviour and consequently, they may feel more angry towards that person. This in turn might have implications for their intervention behaviour, where staff may feel the need to use sanctions and perceive non-aversive approaches as being "too lenient".

Weiner's model (1980, 1986) can therefore be used to demonstrate a link between staff attributions, emotional reactions and intervention behaviour which was supported by Dagnan, Trower & Smith's (1998) research. However, a model proposed by Hastings, Remington & Hatton (1995) highlights the fact that staff responses to challenging behaviour are likely to be influenced by a range of factors, not just their attributions and emotions. This model proposes that staff performance in learning disability services depends upon both staff and organisational characteristics. Staff characteristics can be divided into personal factors, such as attributions about challenging behaviour or disabilities, and demographic factors, such as the gender, age, education and experience

of staff. Organisational characteristics can be divided into an informal culture, such as the “accepted” way of working within a staff group, and the formal culture which may include guidelines around challenging behaviour and the formal philosophy of the service. The authors stress that this model is a dynamic one in which the different factors are subject to a great deal of change. In particular, a dynamic relationship is thought to exist between the characteristics of service users, such as the nature of their challenging behaviour and gender, and the way in which staff respond to challenging behaviour.

1.7 Factors which Influence Staff Beliefs and Responses to Challenging Behaviour

The above models therefore illustrate the complex range of factors which may interact to determine staff intervention behaviour, many of which have not yet been fully investigated. However, research is beginning to reveal a number of conditions which appear to have an impact on staff attributions, their emotional reactions and their intervention behaviour.

1.7.1 The experience of staff

It has been found that experience can affect staff beliefs. Hastings, Remington & Hopper’s (1995) research compared the responses of experienced and inexperienced institutional staff and found that the experienced group were more likely to identify with behavioural models. In contrast, the inexperienced group tended to emphasise emotional states and environmental antecedents.

It also appears that experience can have an impact on the emotional reactions of care staff. Hastings (1993) found that a number of participants reported that their emotional responses to challenging behaviour diminished over time. Alternatively, Fallon (1983) found that although staff did not become “immune”, their emotional reactions to self injurious behaviour changed over time. Initially, they reported feeling empathy, optimism, curiosity and fear but over a course of several months, these feelings changed to frustration, anger, detachment and guilt. Hastings & Remington (1995) again found that more experienced staff reported feeling less disturbed by challenging behaviour. Consequently, they suggested that these staff may be less inclined to carry out behavioural programs as they will not be motivated by their emotional reactions. Alternatively, less experienced staff who experience extreme reactions, may be reluctant to take part in programs, especially if these involve extinction bursts. Furthermore, because of their diminished emotional reactions, experienced members of staff may only respond to more intense incidents, thus differentially reinforcing severe self injury. This “immunity” might also be a coping mechanism for individuals who are trying to survive in a stressful situation and if so, support should be provided.

Finally research suggests that experience can effect the actions of staff. Oliver, Hall, Hales & Head (1996) found that less qualified staff were more likely to choose reinforcing options in response to self injurious behaviour compared to staff who had received more training. Furthermore, Berryman, Evans & Kalbag (1994) found that after training in nonaversive approaches, care staff were less likely to recommend negative

management contingencies, such as punishment or extinction and were more likely to suggest interventions based on skill development and functional analysis.

1.7.2 The topography of challenging behaviour

Hastings, Remington & Hopper's (1995) research illustrated that staff can distinguish between different topographies of challenging behaviour. For example, experienced participants rated aggression and self injury as being social/communicative or having biological causes and stereotypy was seen as being a natural activity resulting in stimulation. However, inexperienced staff were less likely to make this distinction. This study was later replicated by Hastings, Reed & Watts (1997) using a community sample. They also found that staff made different causal attributions according to the topography of the challenging behaviour, but unlike the previous sample, this was not affected by experience. Furthermore, a study by Hastings & Remington (1995) found that the topography of the challenging behaviour had an effect on the emotional reactions of staff. Participants expected to feel more sad, frightened and disturbed when faced with self-injury and aggression compared to stereotypy. Finally, the research of Hastings (1996) found that the topography of the challenging behaviour had an impact on the reported intervention strategies used by staff. Participants were more likely to report that they would stop/restrain a person from engaging in self injurious behaviour, make the environment safe for aggressive behaviour and try to distract a person from engaging in stereotyped behaviour.

1.7.3 The service environment

It appears that the service environment may have an affect on both staff attributions and their reported intervention behaviour. Hastings, Remington & Hopper's research (1995) regarding causal attributions was replicated in a community rather than an institution population by Hastings, Reed & Watts (1997). The community sample appeared less likely to attribute challenging behaviour to biological factors or aspects of the physical environment. It was suggested this might be related to the superior living conditions found in community services compared to institutions and the possibility that the medical model now has less of an impact on services. Likewise Hastings' (1996) study regarding intervention behaviour was replicated in a community sample by Watts, Reed & Hastings (1997). Community participants appeared less likely to emphasise reducing 'unacceptable' behaviours and instead were more concerned with building relationships with clients and the need to find the causes of challenging behaviours. One possible explanation suggested by the authors was that these differences may reflect the impact of 'non-aversive' behavioural approaches in recent years.

1.8 A Possible Role for Gender ?

This research suggests that the experience of staff, the topography of the challenging behaviour and the service environment all influence the way in which challenging behaviour is perceived and responded to. Another important factor is that of gender.

Mitchell & Hastings (1998) demonstrated that there are some differences in the way that male and female members of staff react emotionally to challenging behaviour. Given that Weiner's model (1980, 1986) proposes a link between the emotional reactions of staff and their causal attributions and intervention behaviour, it is possible that gender differences may also exist in the way that male and female members of staff perceive and respond to challenging behaviour. This would be supported by Hastings, Remington & Hatton's model (1995) which cites a role for staff characteristics in their overall performance in learning disability services and emphasises the dynamic relationship between clients and staff. Therefore, both the gender of the staff and the gender of the clients may have an important bearing within services and in particular, on the way in which challenging behaviour is managed.

The term 'gender' refers to the fact that differences experienced by men and women cannot be accounted for solely by given biological features. Instead, these differences are social constructions which have a wide ranging impact on our interactions, social roles and access to power and resources within society (Clements, Clare & Ezelle, 1995). Gender can therefore be defined as a set of learned behaviour patterns that are based on cultural norms regarding one's sex (Caplan, 1988). Although research has not yet specifically tested for gender differences in staff beliefs and responses to challenging behaviour, a small number of authors have written about the subject. Research with other clinical populations has also revealed some relevant findings.

1.9 Gender Differences in the Causal Attributions of Staff

To begin with, it would seem feasible that the attributions of members of staff will be affected by their gender. An important point regarding the identification of challenging behaviour in clients is made by Perkins (1992). She points out that behaviour can only be defined as “challenging” or “inappropriate” depending upon the context in which it occurs. This context is not an absolute, external reality but depends very much on the perspective of the observer, whether they are a man or a women, a challenging client or a member of staff, as everyone understands and experiences the world differently. Unfortunately, the perspective of the person who is being challenging is often neglected, and consideration is only given to those who are being challenged. As Clements, Clare & Ezelle (1995) state ‘what happens to people with learning disabilities is determined by the interpretations/attribution of those without learning disabilities’ and yet ‘the fallibility of this process is not acknowledged’ (p.430).

Gender roles may have an important impact on this attribution process. For example, Ezelle, Clare, & Clements (1992) emphasise how rejection of an ascribed gender role may influence the perceived severity of challenging behaviour in people with learning disabilities. Women are expected to be passive, dependent, supportive, caring and not aggressive, whereas men are considered strong, confident, powerful and assertive. As aggression is more consistent with the masculine stereotype, an aggressive women and a passive man will be interpreted as being more disordered and deviant than a passive women and an aggressive man. If a women shows aggressive challenging behaviour, she

will be seen as rejecting her “feminine” social role and may have masculine qualities ascribed to her. If an man shows aggressive challenging behaviour, he will be seen as adhering too closely to his “masculine” role and as having lost his ability to exercise reason and self control.

Other mainstream research, separate to the field of learning disabilities, also suggests that attributions can be affected by gender. For example, when clinicians are presented with case histories that are identical except for gender, females are more likely to be given a diagnosis of histrionic personality disorder and males are more likely to be given a diagnosis of antisocial personality disorder (Garb, 1997). Clinicians also perceived violent behaviour as being more likely in male rather than female clients (Garb, 1997). Furthermore, in a well known study by Broverman, Broverman, Clarkson, Rosenkrantz & Vogel (1970), clinicians (psychologists, psychiatrists and social workers) were more likely to perceive men as being psychologically healthier than women. When asked to complete a social desirability questionnaire consisting of stereotypic male and female traits, the traits attributed to a healthy sex-unspecified adult were similar to those attributed to man. However, clinicians were significantly less likely to attribute these same traits to a women.

As well as being perceived more negatively in terms of mental health, women may also be seen as being less competent. Goldberg (1968) found that women evaluated essays supposedly written by male authors as being better than the same essays supposedly written by female authors. In addition, research has shown that participants tend to

attribute men's success to their ability whereas women's success is attributed to hard work or luck (Deaux & Emswiller, 1974; Nieva & Guteck, 1981). This even extends to self-attributions of performance (Whitley, McHugh & Frieze, 1986).

1.10 Gender Differences in the Intervention Behaviour of Staff

The second area in which gender may have an important bearing, is the intervention behaviour of staff. In carrying out a small study in a challenging behaviour unit, Burns (1993a) found that staff had different expectations of the roles that should be carried out depending on their gender. The male staff tended to see their role as preventing challenging behaviour from occurring and when it did occur, they concentrated on stopping it quickly and often forcibly. On the other hand, the female staff saw themselves as being responsible for engaging clients in activities and social behaviours. Burns (1993a) suggested that perhaps the men perceived challenging behaviour as a surplus of negative behaviour which needed to be reduced, whereas the women perceived it to be a deficit of social behaviour so that interaction needed to be encouraged. The female staff also talked about being seen as failures when their attempts to interact with clients resulted in challenging behaviour. In this sense, men were seen as doing the "real job" by controlling the behaviour, whereas women were seen as either not helping or contributing to the challenges presented by clients. Burns (1993a) suggested that the adoption of these different roles was a response to the ambiguity and confusion that arises when men are employed in caring professions. As such work is typically seen as "women's work", a division of labour is created to enable men to reaffirm their masculinity. Thus, the

stereotypically masculine role is to control and suppress emotions and the stereotypically feminine role is concerned with the softer, emotional side of caring.

This position is supported by an unpublished study of staff working in a challenging behaviour hospital described by Ezelle, Clare & Clements (1992). Stereotypical images were applied whereby women were seen as being able to diffuse a situation using a gentle, calming approach and were also perceived as creating a comfortable and homely atmosphere. Men on the other hand were seen as being direct and firm when faced with challenging behaviour and were perceived as bringing strength and control to the environment.

It has therefore been proposed that male and female members of staff may adopt different gendered roles when responding to challenging behaviour. Clements, Clare & Ezelle (1995) suggest that the staff group home model may contribute to this process by implicitly creating a situation where staff are seen as the parents and clients are seen as the children. This can produce traditional division of roles where men are responsible for discipline, the acquisition/distribution of resources and women carry out the caring, lower status work. Furthermore, Clements, Clare & Ezelle (1995) propose that the dominance of a masculine perspective raises the issue of "toys for boys". Masculinity has always been associated with a scientific approach (Jordanova, 1989) and solutions to problems are perceived as involving the correct application of the correct technology. A technological answer to challenging behaviour is often pursued whereby the best treatment is either the right drug or the right program delivered in the right way.

However, according to Clements, Clare & Ezelle (1995) such a approach is based on a very asocial view of human problems and does not take the importance of relationships and feelings into account.

1.11 The impact of the Gender of the Client on Service Provision

A third area in need of consideration is the gender of the client and how this may affect the services they receive. Scotti, Evans, Meyer & Walker (1991) carried out a meta-analysis of the learning disability literature published between 1976 to 1987 relating to the treatment of problem behaviour. They found that more intrusive interventions were used with female clients despite no sex differences in the severity of the behaviour or in the outcome. In particular, women were more likely than men to be chosen as participants for studies using aversive treatments. This suggests that the gender of a person with challenging behaviour can have profound implications for their treatment within learning disability services.

It appears that it is not just within the field of learning disabilities that women receive compromised services. For example, Perkins & Rowland (1991) found that women with long term mental health needs received a very different input from men in rehabilitation and continuing care services. They seemed to have longer contact with services and received less intensive input and there was a question about the extent to which their changing needs were met. Furthermore, Carmen, Russo & Miller (1981) state that service provision for mental health problems is influenced by sex-role stereotypes and sex biases.

For example, where disorders fit with female stereotypes, such as depression and phobias, women use services more than men. However, where disorders are incongruent with the “perfect” view of women such as alcohol and substance misuse, the service needs of women are hidden and ignored. The authors state that such stereotyping creates barriers to service access and can lead to inappropriate treatment, especially for women because of their disadvantaged status in society.

1.12 Gender-Blindness and the Lack of Gendered Research in Learning Disabilities

“The area of learning disabilities is a topic so far virtually untainted by gendered analysis” (Burns, 1993b). This is in sharp contrast to the field of mental health where gender issues are closely entwined with clinical issues. For example, a literature search on PsycINFO (1984-1999) using the key words ‘gender’, ‘femininity’, ‘masculinity’ and ‘sex roles’ revealed 135 references when combined with ‘mental health’ and only 4 references when combined with ‘learning disabilities’. This complete lack of gendered research can be seen as reflecting the tendency for gender to be ignored in learning disability services.

Scior (1998) has made the important observation that when referring to “people with learning disabilities” it is often not recognised that we are pertaining to men and women. In addition, the existence of segregated services are based on the assumption that the most salient aspect of a person’s identity is their learning disability so that ‘...individuals are placed in a position of invisibility with regard to their gender, race and class’ (Scior, 1998, p.1). In fact, gender is only recognised when it is seen in negative terms, such as in

the case of unwanted pregnancy and sexual abuse (Burns, 1993b), or when "head counts" of men and women are carried out in research (Clements, Clare & Ezelle, 1995). Burns (1993b) suggests that people with learning disabilities are very near the bottom of the "pecking scale of life" to the extent that '...their personal experience and identity is so barren that gender appears to be immaterial' (p.103). Even services which seek to create "ordinary living" for people with learning disabilities, typically fail to take gender issues into account (Brown, 1996). For example, women may be required to live with men who are neither family, friends or lovers and access to typical women's roles, such as parenting and caring for others, may be denied. In the same way, despite its attempts to create valued social roles for people with learning disabilities, normalisation has been criticised for ignoring the wider social and political processes, and the gendered social relations which frequently result in deleterious outcomes for women (Burns, 1993b). It has therefore been argued that learning disability services are gender-blind and as a consequence, 'core experiences may be denied, needs will be misunderstood and dominant but damaging value systems will be imposed' (Clements, Clare & Ezelle, 1995, p.426).

This gender-blindness can also be seen where challenging behaviour is concerned. As Burns (1998) points out, we do not know if or to what extent gender is important to our understanding of challenging behaviour because the question is never asked. In carrying out a literature review on the subject, she found that very little attention was paid to gender issues and sex differences. There has been even less research interest focusing on possible biological and hormonal differences between men and women with learning

disabilities, in sharp contrast to the mainstream literature. For example, there was no published research on the menopause in women with learning disabilities until Carr & Hollins' paper in 1995, despite the possibility that the associated physical and emotional discomfort may well be expressed as "challenging" and misattributed by others. Furthermore, Burns (1998) suggests it is unlikely that people with learning disabilities will live up to the image of the "perfect man or the perfect women", nor will they make many of the transitions in life that are enjoyed by people without learning disabilities, such as finding a partner, creating a home, and having a baby. Consequently, they have much to feel angry about and it is not surprising that such feelings may well be expressed in such a way that is considered "challenging".

Burns (1998) concludes by questioning the extent to which our attributions of challenging behaviour and the way in which we intervene may change, if gender is taken into account. Otherwise, she suggests we will continue to distance ourselves from those who use our services and fail to understand the real reasons underlying their behaviour.

1.13 Summary of Introduction

To summarise, challenging behaviour has a deleterious effect on both the lives of those who are challenging and those in the position of caring. Furthermore, it is known that such behaviours are social in nature and that the interaction between clients and care staff is crucial in the maintenance and development of challenging behaviour. Research into staff intervention behaviour has identified that staff typically respond with short term

intervention strategies which in the long term may reinforce the challenging behaviour. It has been proposed that staff act in this way to escape or avoid the aversive nature of the experience. Further research has also suggested that the intervention behaviour of staff is related to their causal attributions and their emotional reactions. It is known that these factors are affected by the experience of staff, the topography of the challenging behaviour and the service environment.

Although men and women appear to differ in their emotional reactions, the effect of gender on causal attributions and intervention responses has not yet been specifically investigated. Very little research has been carried out on gender in the field of learning disabilities, although a small number of clinicians have outlined ways in which male and female care staff may differ in their understanding of and responses to challenging behaviour. It has also been highlighted that female clients may receive more intrusive interventions compared to male clients. Yet despite the importance of these differences, services remain gender-blind and it has been proposed that this lack of awareness may contribute to the existence of challenging behaviour.

2. AIMS OF THE STUDY AND HYPOTHESES

The main aims of the research were twofold. The first was to determine whether there were any gender differences in the attributions, emotional reactions and intervention behaviour of care staff who worked with people who were challenging. The second was to determine whether the gender of the client had any impact on the responses of the care staff.

In order to avoid introducing a third factor to the design (which would have implications for the sample size), it was necessary to limit the focus of the research to a specific form of challenging behaviour. Aggressive challenging behaviour was chosen in preference to self injurious or stereotyped behaviour for a number of reasons. Research suggests that the behaviours which are viewed as the most challenging by staff, tend to be those which disrupt the environment rather than the progress of the individual (Lowe, Felce & Blackman, 1995). Furthermore, aggression is one of the most common forms of challenging behaviour (Qureshi & Alborz, 1992; Emerson, Alborz, Reeves, Mason, Swarbrick, Kiernan & Mason, 1997) and it was hoped participants would have more experience working with aggressive clients compared to those who engaged in self injurious or stereotyped behaviour. Aggressive behaviour was also more compatible with the focus of the research, given its associations with gender stereotypes.

On this basis, the specific hypotheses tested in the research were;

1. Self reported causal attributions, emotional reactions and intervention strategies for aggressive challenging behaviour will differ between male and female members of staff.
2. Staff will report different causal attributions, emotional reactions and intervention strategies according to the gender of the client.

3. METHOD

3.1 Design

A between subject factorial design was used to test the hypotheses. The first factor was the gender of the participants (male or female) and the second factor was the gender of the vignettes used in the questionnaire (male or female). Thus data was collected for four independent groups. The decision to use a between subject design in this study was based on the recommendations of Gekoski, Johnson, Knox & Evans (1984). They suggested that within subject designs may emphasise sex differences between targets and participants. Referring to research on age stereotypes, Kogan (1979) and Schonfield (1982) also warn that within subject designs may intensify differences between the groups being studied. It therefore seemed more appropriate to use a between subjects design to increase the validity and reliability of the findings.

3.2 Participants

3.2.1 Selection criteria

The target population were staff who worked in learning disability services managed by two local Trusts (which will be referred to as Trust one and Trust two) and the

corresponding social services for these areas. There were two main criteria for entry to the research²:

1. Staff spent the majority of their working day in 'activities that involve the daily care and supervision of residents' (Hauber & Bruininks, 1986, p.97)
2. Staff worked with at least one service user who engaged in some challenging behaviour (topographically defined as aggression towards self, property destruction or physical aggression towards staff/others).

Using these criteria a total of thirty-one community residential homes were included in the research (seventeen from Trust one and fourteen from Trust two) and a total of seven day centres across both regions.

The majority of participants were support workers, nursing staff and care assistants although line managers were also included if they expressed a wish to participate. Additional participants were also recruited from first year students on a Diploma in Learning Disability (Challenging Behaviour) course at a local University. All students on this course worked concurrently in learning disability services with people with challenging needs and they were invited to take part in the research during the first week of the course. The demographic details of all participants are provided in the results section.

² These criteria were adopted from Mitchell & Hastings (1998).

3.2.2 Establishing a sample size

The necessary sample size was estimated using the guidelines suggested by Cohen (1988, 1992). In order to calculate an effect size, a review was carried out of related literature. No study was found within the learning disability field which specifically manipulated the gender of vignettes. Furthermore, there has been no specific examination of gender effects on either staff causal attributions nor intervention behaviour. However, Mitchell and Hastings (1998) found differences between male and female care staff on the Emotional Reactions Scale, where men were significantly more likely to react to challenging behaviour with depression/anger. It was therefore necessary to use this data as the basis for the calculation. This produced a medium effect size of 0.5, which is the usual size of effect studied in research by psychologists (Cohen, 1988, 1992). Alpha was then set at 0.05 (two-tailed) and power was selected as 0.80. Using the tables provided by Cohen (1988; 1992), these parameters produced a recommended sample size of 64 men and 64 women. This meant that a total of 128 participants were needed to detect any gender differences between members of staff. Of the 64 men, 32 received a male vignette and 32 received a female vignette and a similar division was made for the 64 women. It was feasible that this sample would not be large enough to detect a gender effect within the vignettes, but given the constraints of the dissertation, it was not possible to expand the sample size any further.

3.2.3 Sampling procedure

Previous research suggested an approximate return rate of 60-68% (Hastings, 1996; 1997b) so that the questionnaire needed to be distributed to approximately 200 care staff. Initially all staff, regardless of gender, were invited to participate in the research. However, as the ratio of male to female staff across services was approximately 35:65, sixty-four females responded to the questionnaire before the quota of male participants was obtained. It was therefore necessary to invite male staff only to take part from the remaining services that reached the selection criteria.

3.3 Measures and Materials

The following questionnaires were used in the research to measure causal attributions, emotional reactions and staff intervention behaviour;

3.3.1 The Challenging Behaviour Attributions Scale (CHABA) (Hastings 1997b)

The CHABA was developed from a previous questionnaire used to investigate staff causal attributions (Hastings, Remington & Hopper, 1995; Hastings, Reed & Watts, 1997). It consisted of a fictional vignette describing a client engaging in either aggressive or stereotyped behaviour. Respondents were asked to indicate from a list of 33 items, how relevant they thought different causal factors might be, according to a five point likert scale ranging from very unlikely (-2) to very likely (2). The questionnaire yielded five causal sub-scales; learned behaviour (learned positive plus learned negative), biomedical,

emotional, stimulation and physical environment. Rather than being a measure of “attributional style”, the CHABA was concerned with how staff applied these causal models in different contexts. A score for each sub-scale was obtained by calculating an average from each of the items relating to that causal model. A score below zero suggested the respondent perceived the sub-scale to be an unlikely explanation for the challenging behaviour, whereas a score above zero suggested the respondent considered the sub-scale to be a more likely explanation.

A preliminary psychometric analysis of the CHABA was carried out by Hastings (1997b). The questionnaire was distributed to a number of community group homes and units in the south of England. Ninety care staff responded which represented a 60% response rate. Of these, 68 were women and 20 were men (demographic data for two participants was not known). The mean age of participants was 37.88 years and the mean length of experience of working with people with learning disabilities was 7.65 years. From the data collected, Hastings (1997b) concluded that the CHABA was a flexible practical measure of staff attributions. Furthermore, each of the sub-scales showed moderate to good levels of reliability, where Cronbach's Alpha values ranged from 0.65 to 0.87. However, it was not possible to establish validity data for the CHABA, due to a lack of external validation criteria.

3.3.2 The Emotional Reactions Scale (Mitchell & Hastings, 1998)

The Emotional Reactions Scale was developed in a study by Mitchell & Hastings (1998). Respondents were asked to consider a recent personal experience where aggressive challenging behaviour was directed towards them. They were then required to indicate from a list of 15 items, those emotions which typically described their own reaction. These items were developed from a previous interview study by Hastings (1995) and also from research literature. Responses were made on a four point scale (0 = no, never; 1 = yes, but infrequently; 2 = yes, frequently; 3 = yes, very frequently) so that higher scores represented more intense emotion. Factor analysis revealed two sub-scales; feelings of depression/anger (ten items) and feelings of fear/anxiety (five items). For the purposes of this study, as the scale was not based on any vignettes, participants were asked to indicate whether they were thinking of a male client, a female client or both male and female clients when rating their reactions.

Eighty-three care staff from community based services participated in Mitchell & Hastings' (1998) research to assess the psychometric properties of the scale. Of these, 38 (46%) were men and 45 (54%) were women. The mean length of experience was 5.75 years and their mean age was 32.43 years. This study revealed that the Emotional Reactions Scale had high internal consistency where Cronbach's Alpha values were 0.85 for depression/anger and 0.82 for fear/anxiety. The two sub-scales were also shown to measure different aspects of negative emotion, although there was a moderate correlation between the two ($r = 0.47$). The test-retest reliability of the scale was also found to be

good where intra-class correlation coefficients were calculated for a smaller sample who completed the scale twice (depression/anger: $r = 0.74$; fear/anxiety: $r = 0.81$). Finally, the use of a social desirability scale suggested that participants' responses were not significantly influenced by a social desirability response bias.

3.3.3 The Staff Intervention Questionnaire (Hastings, 1996)

The Staff Intervention Questionnaire consisted of a number of open ended questions regarding how staff would respond to an episode of challenging behaviour, as presented in a given vignette. These vignettes described aggressive, self injurious or stereotyped behaviour derived from topographical definitions of these behaviours found in the research literature. Respondents were asked to record immediate and long term intervention strategies, as well as explanations for their proposed interventions.

This questionnaire was developed in a study by Hastings (1996) using a sample of 109 nursing staff who all worked in a large institution in England. The majority had worked with people with learning disabilities for more than 5 years and were aged 26-35 years. Sixty-four of the respondents were women and 45 were men. Overall there was a 68% response rate. Hastings (1996) used content analysis to create a categorisation system for their responses. This coding procedure was found to be somewhat reliable with a 76% agreement being achieved between two raters. However, Watts, Reed and Hastings (1997) replicated the study using a community sample and further developed the coding frames. This resulted in a 92% agreement between raters. Although no formal validity

checks were performed on this questionnaire, Hastings (1996) suggested that as staff reported similar intervention strategies to those found in previous research, a certain degree of face validity could be assumed.

All three measures were available for use free of charge and permission was sought from the author (see Appendix I). They were then reproduced using a word processor, to form one larger questionnaire. A short section on demographic details was added to collect information on the gender of the participant, their age, job title, place of work, number of clients using the service, length of time working in learning disability services and the amount of training undertaken on challenging behaviour (see Appendix II). This section was designed to be consistent with the demographic information collected by Hastings (1997b) in the development of the CHABA.

3.4 Pilot Study

In order to determine the appropriateness of the measures used, a small pilot study was carried out. Four members of staff from Trust one were asked to complete the questionnaire and comment on its structure using a feedback form. Two of these participants described the questionnaire as 'easy' to fill in and the other two described it as 'okay'. In addition, other positive comments were made about the format so that it was not necessary to make any changes.

3.5 Ethical Approval

In order to ensure the research project was ethical, various precautions were taken so that participation was voluntary, anonymous and based on informed consent. The questionnaires were accompanied by two copies of an information sheet which potential respondents were asked to read before deciding whether or not to take part (see Appendix III). This provided a summary of the aims and purpose of the research and highlighted that participants would need to consider an episode of challenging behaviour that some may find distressing. It also emphasised that managers were aware that participation was voluntary and they would not be informed who had taken part, nor would they be given any details about the responses of individuals. It was stressed that all data would be treated in confidence and that the original questionnaires would be destroyed once the analysis was complete. Finally, participants were informed that a summary of the results would be available on request and the research may also be published in a journal, but that no identifiable information would be contained in any reports.

The information sheet also contained a contact address and telephone number for the researcher, should the participant wish to discuss any issues that were raised by the study. One copy of the sheet was to be retained by the participant for their information and the other was signed and returned. These were then kept separate from the questionnaires to preserve anonymity.

Details of the proposed research were submitted to three separate ethical committees in order to gain permission to approach participants from the two local Trusts. Two of these committees gave their full approval and the third considered the research exempt from their jurisdiction because it did not involve direct patient research. Ethical approval was also obtained from the Salomons Centre Ethics Panel to cover the day centres managed by social services and the diploma course wrote to confirm that they did not require the research to be submitted to their own panel because it was carried out on a voluntary basis (see Appendix IV for copies of all letters).

3.6 Procedure

Initially the support of the Clinical Psychology Learning Disability Departments in both of the Trusts was obtained. The next stage involved consulting with the directors of residential and day services in each geographical area to determine which community homes and day centres reached the criteria for inclusion. The individual managers of each setting were then contacted over the telephone and written information was provided (see Appendix V). When their consent was obtained, the questionnaires were delivered to the work location of participants so that the study could be introduced and any questions could be answered. This usually took place during staff hand-over meetings in the residential homes or during the morning planning meetings in the day centres. The challenging behaviour diploma students were approached on a similar basis after permission was obtained from the course director. The questionnaires were returned

either in person, if the participant chose to complete it during the time of the visit, or via the post in a stamped addressed envelope, if it was completed at a later time.

3.7 Data Analysis

All the questionnaires were coded and the data was loaded onto a personal computer. Statistical analysis were carried out using SPSS for Windows (Release 7), the details of which are provided in the Results section.

4. RESULTS

The results have been divided into four sections in order to present the data in a clear format. The first section is concerned with the demographic details of the participants, the second presents the data on causal attributions, the third presents the data on emotional reactions and the fourth presents the data on staff intervention behaviour.

4.1 Demographic Details of the Participants

Overall, it was necessary to distribute 354 questionnaires to the participating residential homes, day centres and challenging behaviour diploma students, before 128 were returned. This represented a response rate of approximately 36% which is lower than the 60 - 68% reported in previous research by Hastings (Hastings, 1996; 1997b). However, Hatton & Emerson (1995) have reported that response rates can vary between 22 to 75%. In addition, as it was important to obtain equal numbers of male and female participants for the research design, more questionnaires needed to be distributed.

The demographic details of the participants, subdivided by gender, are shown in Table 1.

Table 1. Demographic details of participants

Variable	Parameters	Male Participants N=64	Female Participants N=64
Age	16 - 25 years	4 (3.12%)	9 (7.03%)
	26 - 35 years	29 (22.66%)	24 (18.75%)
	36 - 45 years	15 (11.72%)	14 (10.94%)
	46 - 55 years	12 (9.38%)	17 (13.28%)
	56 years and over	4 (3.12%)	0 (0%)
Job	Care/support worker (unqualified)	41 (32.03%)	45 (35.16%)
	Professional/managerial	23 (17.97%)	19 (14.84%)
Place of work	Residential home	45 (35.16%)	36 (28.13%)
	Day Centre	11 (8.59%)	16 (12.5%)
	Other	8 (6.25%)	12 (9.38%)
Mean no. of clients		24.06	75.95
No. of years worked	Less than 3 months	2 (1.56%)	1 (0.78%)
	3 - 6 months	2 (1.56%)	0 (0%)
	6 months to 1 year	2 (1.56%)	1 (0.78%)
	1 to 5 years	25 (19.53%)	21 (16.41%)
	More than 5 years	33 (25.78%)	41 (32.03%)
Training in challenging behaviour	None	5 (3.91%)	16 (12.5%)
	Limited (1 or 2 short courses)	23 (17.97%)	27 (21.09%)
	Fair amount (several courses)	24 (18.75%)	12 (9.38%)
	Detailed (many courses)	10 (7.81%)	7 (5.47%)
	Extensive (specialism)	2 (1.56%)	2 (1.56%)

Unfortunately there was no information available on non-responders, so that it was not possible to determine how representative the sample was. However, it can be seen from Table 1 that the majority of participants were aged between 26 to 35 years and had

worked with people with learning disabilities for more than five years. Most were unqualified and worked in residential services, having received a “limited” amount of training in challenging behaviour. This is broadly consistent with the findings of Hastings (1996, 1997b) and Mitchell & Hastings (1998) in the development of the CHABA, the Staff Intervention Questionnaire and the Emotional Reactions Scale. However, respondents in this study reported working with a larger number of clients, possibly due to the fact that they worked in day centres rather than just residential homes.

The Mann-Whitney and Chi-Square tests were used to detect any significant gender differences within the demographic data. There were no significant differences for the age of participants ($Z=-0.506, p=0.613$), their job ($\text{Chi-Square}(1)=0.567, p=0.451$), their place of work ($\text{Chi-Square}(2)=2.726, p=0.256$), the number of clients using the service ($Z=-1.640, p=0.101$) and the number of years worked in learning disability services ($Z=-1.607, p=0.108$). However, the male participants in the sample had received significantly more training in challenging behaviour than the female participants ($Z=-2.783, p=0.005$).

Of the 128 participants, 36 were recruited from the challenging diploma course. Although all the students concurrently worked in learning disability services, the demographic details of these participants were compared to the rest of the sample to check for any significant differences. Both samples contained a similar ratio of men to women ($\text{Chi-Square}(1)=1.391, p=0.238$). However as a group, the challenging behaviour diploma students had worked more years in learning disability services ($Z=-3.355, p=0.001$), were more likely to hold professional/managerial positions ($\text{Chi-Square}(1)=9.056, p=0.003$)

and were more likely to work in locations other than residential homes and day centres (such as in community teams) ($\text{Chi-Square}(2)=32.532, p=0.000$).

4.2 Causal Attributions of Challenging Behaviour

The data were first examined by plotting the scores of each sub-scale of the CHABA against a superimposed normal curve. On inspection, the scatter of data for each sub-scale were consistent with a normal distribution, so it was appropriate to use parametric tests (see Appendix VI).

The mean scores and standard deviations, sub-divided by the gender of the participant and the gender of the vignette are presented in Table 2. Factorial ANOVAs were used to assess if any of the differences were statistically significant where the two factors were the gender of the participant and the gender of the vignette. In preparation, the Spearman rank correlation was used as a measure of the strength of association between the demographic details of the participants and their scores on the CHABA. This showed significant relationships at the 0.05 level for the number of years that participants had worked in learning disability services and their scores for the Biomedical sub-scale ($r_s = -0.213$) and the Stimulation sub-scale ($r_s = 0.184$). This suggested that the longer participants had worked, the less likely they were to cite biomedical factors as contributing to challenging behaviour and the more likely they were to cite stimulation as being important. The number of years worked was therefore used as a covariate when calculating the factorial ANOVAs.

Table 2. Mean scores and standard deviations on the CHABA, subdivided by gender of the participant and gender of the vignette.

Sub-scales of the CHABA	Mean score and standard deviation	Male participants N=64	Female participants N=64	Male vignettes N=64	Female vignettes N=64
Learned Positive	Mean	1.13	1.37	1.23	1.27
	SD	0.38	0.48	0.44	0.46
Learned Negative	Mean	0.72	0.83	0.85	0.70
	SD	0.53	0.60	0.56	0.56
Learned Behaviour	Mean	0.92	1.10	1.04	0.98
	SD	0.37	0.41	0.41	0.39
Biomedical	Mean	0.25	0.29	0.26	0.28
	SD	0.52	0.52	0.53	0.51
Emotional	Mean	0.88	0.93	0.88	0.93
	SD	0.49	0.51	0.57	0.42
Physical Environment	Mean	0.33	0.31	0.37	0.27
	SD	0.52	0.44	0.47	0.49
Stimulation	Mean	0.54	0.71	0.62	0.63
	SD	0.54	0.53	0.54	0.54

Note. Items in bold indicate where statistical analysis revealed significant gender differences at the 0.01 level.

The factorial ANOVAs revealed two significant main effects for the gender of the participants at the 0.01 level. Female participants were more likely than male participants to rate the learned positive sub-scale ($F(1,123)=10.03$, $p=0.002$) and the learned behaviour sub-scale ($F(1,123)=7.00$, $p=0.009$) as likely causes of aggressive challenging

behaviour. However, there were no significant main effects for the gender of the vignettes, nor were there any significant interactions.

In relation to the research hypotheses, the analysis revealed some significant differences between male and female members of staff when reporting their causal attributions of aggressive challenging behaviour. However, their causal attributions did not differ where the gender of the vignettes were concerned.

4.3 Emotional Reactions to Challenging Behaviour

Initially the data were examined by once again plotting the depression/anger and fear/anxiety scores against a superimposed normal curve. The scatter of data in both graphs reflected a normal distribution curve so that it was appropriate to use parametric tests (see Appendix VII).

Unlike the CHABA, the Emotional Reactions Scale was not based on any vignettes. Therefore, participants were asked to indicate the gender of the client(s) they were thinking of when completing this scale. Of the male participants, 31 thought of a male client, 4 thought of a female client and 29 thought of both a male and female client. Of the female participants, 18 thought of a male client, 11 thought of a female client and 35 thought of both male and female clients. This suggested that male and female participants tended to think of both male and female clients when completing the scale. However, it also appeared that male participants were more likely than female participants to refer to

incidents of challenging behaviour involving male clients. This difference was tested using Chi-Square and was found to be significant ($\text{Chi-Square}(1)=6.21, p=0.01$).

Participants scores on the Emotional Reactions Scale, sub-divided by the gender of the participant and the gender of the client are presented in Table 3. The Spearman rank correlation was used as a measure of the strength of association between the demographic details of the participants and their scores on the scale. No significant relationships were found.

Table 3. Mean scores and standard deviations on the Emotional Reactions Scale, subdivided by the gender of the participant and the gender of the client.

Sub-scales of the Emotional Reactions Scale	Mean score and standard deviations	Male participants (N=64)	Female participants (N=64)	Male client (N=49)	Female client (N=15)	Both male and female clients (N=64)
Depression/anger	Mean SD	7.34 3.75	6.38 3.57	7.73 3.66	5.93 3.88	6.41 3.56
Fear/anxiety	Mean SD	4.13 2.43	4.67 2.58	4.96 2.84	4.07 2.69	4.05 2.14

The intention was to analyse the data using factorial ANOVAs. However, due to the choices of the participants when completing the scale, the data consisted of very unequal cell sizes. In addition, as the research hypotheses were primarily concerned with main

effects rather than interactions between the gender of the participants and the gender of the clients, the data were analysed using one-way ANOVAs.

Where the gender of participants were concerned, there were no significant differences on the depression/anger sub-scale ($F(1,126)=2.25, p=0.14$) nor the fear/anxiety sub-scale ($F(1,126)=1.52, p=0.22$). Similarly, there were no significant differences where the gender of the client was concerned on the depression/anger sub-scale ($F(2,125)=2.4, p=0.09$) nor the fear/anxiety sub-scale ($F(2,125)=2.01, p=0.14$).

In relation to the research hypotheses, these findings suggest there are no significant differences between the self reported emotional reactions of male and female members of staff in relation to aggressive challenging behaviour. Similarly, their emotional reactions did not differ according to the gender of the client.

4.4 Intervention Behaviour in Response to Challenging Behaviour

Participants responses to the Staff Intervention Questionnaire were coded using the categories developed by Watts, Reed and Hastings (1997). Thirty-two of the questionnaires (25%) were also coded by a second person not involved in the research. Inter-rater reliability was calculated using the formula given by Hastings (1996) [$\text{agreements} / (\text{agreements} + \text{disagreements}) \times 100\%$] which yielded an overall agreement of 90% between raters. Any disagreements were resolved by discussion before further analysis was carried out on the data.

The immediate and long term intervention strategies given by staff, along with their explanations are presented in Table 4, sub-divided by the gender of the participant and the gender of the vignette.

Table 4. Frequency of intervention strategies and explanations on the Staff Intervention Questionnaire, subdivided by the gender of the participant and the gender of the vignette.

Strategy / Explanation	Male participants N=64	Female participants N=64	Male vignettes N=64	Female vignettes N=64
<u><i>Immediate intervention strategy</i></u>				
Calm/communicate with person	39	51	48	42
Find out why	24	40	30	34
Distract person	12	18	13	17
Make environment safe	22	35	25	32
Restraint (including medication)	8	6	7	7
Stop the behaviour	11	7	6	12
Leave alone/give space	25	17	22	20
Explain effects of behaviour	6	8	7	7
Implement management strategy	6	11	7	10
<u><i>Explanations</i></u>				
Prevent harm	33	36	34	35
Create positive atmosphere	18	32	27	23
Deals with cause	9	14	9	14
To find out why	25	29	28	26
Distract	4	7	6	5
Behaviour unacceptable	7	6	5	8
Individual's right	0	1	1	0

<u>Long term intervention strategy</u>				
Find causes of behaviour	40	38	36	42
Implement management strategy	32	30	36	26
Involve in activities	8	16	14	10
Normalise life style	3	11	5	9
Call professionals	14	25	25	14
Develop supportive relationship	6	10	8	8
<u>Explanations</u>				
Quality of individual's life	13	20	23	10
To find causes	13	23	15	21
Deals with cause	28	31	22	37
Best intervention strategy	11	12	14	9
Behaviour unacceptable	3	0	3	0
Others' skills needed	8	9	11	6
Individual's right	0	0	0	0

Note. Participants often gave more than one intervention strategy and explanation
Items in bold indicate where statistical analysis revealed significant gender differences.

Logistic Regression was carried out on each of the intervention strategies and explanations to determine if any of the differences were statistically significant. For each calculation, after controlling for the gender of the participants and the gender of the vignettes, a forward selection procedure was used to select a sub-set of the demographic variables. These included the number of years that participants had worked in learning disability services, the amount of training they had received in challenging behaviour and whether they were unqualified or qualified. These items were selected on the basis that training and experience may affect the intervention behaviour of staff (Oliver, Hall, Hales & Head, 1996; Berryman, Evans & Kalbag, 1994).

Several significant findings were found where the gender of the participants were concerned. For the immediate intervention strategies, female members of staff were more likely to report that they would calm/communicate with the person (Wald(1)=5.27, $p=0.02$), find out why (Wald(1)=9.76, $p=0.001$) and make the environment safe (Wald(1)=5.32, $p=0.02$) compared to male members of staff. By means of explanations, they were also more likely to say they would create a positive atmosphere (Wald(1)=6.32, $p=0.01$). For the long term intervention strategies, female members of staff were more likely to report that they would normalise the persons lifestyle (Wald(1)=5.19, $p=0.02$) and call professionals to help (Wald(1)=4.52, $p=0.03$). Where the explanations were concerned, they were also more likely to say their proposed intervention would find the causes of the persons behaviour (Wald(1)=6.04, $p=0.01$).

Fewer significant differences were found where the gender of the vignettes were concerned. However for the long term intervention strategies, participants were more likely to say they would call professionals when faced with a male as opposed to a female vignette (Wald(1)=4.52, $p=0.03$). By means of explanations, participants were also more likely to say their intervention would improve the quality of the individuals life when faced with a male vignette (Wald(1)=5.99, $p=0.01$). However, when given a female vignette, they were more likely to suggest their intervention would deal with the causes of the individual's behaviour (Wald(1)=6.95, $p=0.008$).

The selected demographic variables also produced some significant findings. Participants with professional/managerial qualifications were more likely than unqualified participants

to say they would distract the person ($\text{Wald}(1)=5.99, p=0.01$) and use restraint (including medication) ($\text{Wald}(1)=3.83, p=0.05$) as immediate intervention strategies. They also tended to cite preventing harm as an explanation for their response ($\text{Wald}(1)=5.95, p=0.01$). Furthermore, where the long term interventions were concerned, those with professional/managerial qualifications were more likely to report implementing a management strategy ($\text{Wald}(1)=11.59, p=0.0007$) and normalising the individual's lifestyle ($\text{Wald}(1)=5.22, p=0.02$). By means of explanations, they tended to cite improving the quality of the individual's life ($\text{Wald}(1)=4.54, p=0.03$). In contrast, participants who were unqualified were more likely to say the skills of others were needed as an explanation for their long term intervention ($\text{Wald}(1)=3.84, p=0.05$).

Additional significant findings were also found for the number of years that participants had worked in learning disability services. Those who were more experienced were more likely to report finding out why as an immediate strategy ($\text{Wald}(1)=4.74, p=0.03$) and involve the individual in activities as a long term strategy ($\text{Wald}(1)=4.66, p=0.03$). Finally, the participants who had received training in challenging behaviour were more likely than those who had received little or no training to emphasise finding the causes of the behaviour as a long term intervention ($\text{Wald}(1)=3.80, p=0.05$) and as an explanation ($\text{Wald}(1)=6.66, p=0.01$).

It can therefore be seen that experience and training had a significant effect on the intervention strategies and explanations given by participants. Furthermore, in relation to the research hypotheses, the analysis revealed some significant differences between male

and female members of staff in their self reported intervention strategies for aggressive challenging behaviour. The responses given by participants also differed on three occasions according to the gender of the vignette.

5. DISCUSSION

5.1 Discussion of Findings in Relation to the Research Hypotheses

The first hypothesis was that causal attributions, emotional reactions and intervention strategies for aggressive challenging behaviour would differ between male and female members of staff. To some extent, the results supported this hypothesis. Significant gender differences were found between participants for both their attributions of challenging behaviour and their self reported intervention behaviour. Female participants were more likely than male participants to rate the learned positive and learned behaviour sub-scales of the CHABA as likely causes of challenging behaviour. They were also more likely to report trying to calm/communicate with the person, find out why, make the environment safe and create a positive atmosphere as their immediate intervention responses and explanations. In addition, they were more likely to say they would normalise the person's lifestyle, call professionals to help and find the causes of the person's behaviour as long term interventions and explanations. However, there were no significant gender differences where emotional reactions to challenging behaviour were concerned, as measured by the Emotional Reactions Scale.

The second hypothesis was that staff would report different causal attributions, emotional reactions and intervention strategies depending on the gender of the client. The results only provided limited support for this hypothesis where the intervention behaviour of

staff was concerned. When faced with a male vignette, participants reported they were more likely to call professionals and improve the quality of the individuals life and when faced with a female vignette, they were more likely to suggest their intervention would deal with the causes of the challenging behaviour. However, no significant differences were found on the CHABA or the Emotional Reactions Scale when the results were analysed according to the gender of the vignette or client.

5.2 Discussion of Findings in Relation to Previous Research

5.2.1 The causal attributions of staff

When the combined responses of both male and female staff are considered, participants in this study reported similar causal attributions to the participants in Hastings (1997b) research. Learned behaviour (especially learned positive) and emotional were seen as being the most likely causes for aggressive challenging behaviour and physical environment and biomedical were seen as being the least important. However, where gender differences are concerned, it is interesting that female participants were more supportive of the behavioural model, especially in terms of positive reinforcement, compared to male participants. This is particularly intriguing given that the male participants in the sample had received more training in challenging behaviour, which in contemporary settings is usually based on behavioural analysis (Hastings, 1997b). It is possible that for some reason, the male participants in this sample were less convinced by the behavioural model or had difficulty in translating the contents of such training

programs into their everyday working lives. It is also possible that the female participants who were also mothers had more practical experience at applying behavioural principles. In this sense, their experiences of child rearing may have guided their causal attributions of challenging behaviour. For example, they may equate the aggressive behaviour of clients with the temper tantrums of their own children, both of which may serve the function of obtaining positive consequences or avoiding negative ones. Such an explanation would coincide with Clements, Clare & Ezelle's (1995) description of the staffed group home. They suggest that staff may perceive their roles as that of parents and endeavour to create a 'family life' with the implication that the clients are in some way like their children.

5.2.2 The emotional reactions of staff

The results showed that the male participants in this study reported feeling more angry/depressed in response to aggressive challenging behaviour and the female participants reported feeling more fear/anxiety. However, unlike Mitchell & Hastings' (1998) findings, these differences were not statistically significant. There are two possible explanations for this discrepancy. The first is that gender differences do not exist between male and female members of staff in their emotional reactions, which would suggest that the previous findings were spurious. The second is that gender differences do exist in certain populations depending on their differing experiences of challenging behaviour. Mitchell & Hastings (1998) recommend the scale is best used with staff who work with severely challenging clients. It may be that the sample used in this

research did not have enough experience of severe challenging behaviour and if so, the measure may not have been sensitive enough to detect differences in their emotional reactions.

It is interesting however, that when asked to indicate who they were thinking of when completing the Emotional Reactions Scale, male participants were more likely than female participants to refer to a male client. This may be a reflection of the fact that there is an increased prevalence of challenging behaviour in men with learning disabilities (Emerson, 1995). In addition, it may be that male staff tend to be more involved in the incidents involving male clients, especially where aggression is concerned, because of an expectation that they should 'control' the challenging behaviour (Burns, 1993a; Ezelle, Clare & Clements, 1992).

5.2.3 The intervention behaviour of staff

When the combined responses of male and female members of staff are concerned, participants in this study reported very similar intervention strategies and explanations for aggressive challenging behaviour to the participants in Hastings (1996) and Watts, Reed & Hastings (1997) research. Their immediate responses involved calming/communicating with the client, finding out the causes of the behaviour and making the environment safe in order to prevent harm. Their long term responses involved finding the causes of the aggression and implementing a management strategy in order to deal with the challenging behaviour.

When the responses of the staff are considered in relation to gender, a number of interesting differences emerged. To begin with, female participants were more likely than male participants to emphasise the need to find the causes of the challenging behaviour, both as an immediate response and as a long term explanation and to call other professionals to help. This is consistent with their causal attributions for challenging behaviour where they were more supportive of the behavioural model, especially positive reinforcement, in comparison to male participants.

The second interesting finding is the tendency of female participants to say that they would calm/communicate with the person, make the environment safe, try to create a positive atmosphere and normalise the person's lifestyle. This may reflect the findings of Burns (1993a) and Ezelle, Clare & Clements (1992) regarding the expectations ascribed to staff in challenging behaviour services. In these studies, male staff were seen as being responsible for preventing and controlling challenging behaviour, and were perceived as being direct and firm when faced with an incident. Female staff on the other hand, were seen as being responsible for engaging clients in activities and social behaviours and as being able to diffuse a situation using a gentle, calming approach. Furthermore, Clements, Clare & Ezelle (1995) refer to the traditional parenting roles reproduced by the group home model whereby male staff are responsible for discipline and female staff carry out the caring, lower status work. The finding that female participants reported different intervention responses to male participants may therefore illustrate the division of roles and expectations placed on staff in learning disability services.

5.2.4 The gender of vignettes

The findings of the study revealed very few significant results where the gender of the vignettes were concerned. However, when faced with a male vignette, participants were more likely to report that they would call professionals to help and that their intervention would improve the quality of the individual's life. Alternatively, when faced with a female vignette, they were more likely to suggest their intervention would deal with the causes of the challenging behaviour. A possible interpretation of these findings is that given a male vignette, participants perceived the challenging behaviour as being more serious and consequently, were more likely to seek professional input. In contrast, when the vignette was female, participants may have deemed the challenging behaviour as being less serious and so were more inclined to say they would deal with the cause themselves. Furthermore, the emphasise on improving the quality of life where the male vignette was concerned may possibly be interpreted as meaning that male clients receive a more comprehensive input from services. Such an explanation is consistent with the findings of Perkins & Rowland (1991) who found that women with long term mental health problems received less intensive input from services compared to men and there was a question as to how well their needs were met.

Apart from these differences, the gender of the vignette did not significantly affect the remaining intervention responses and explanations given by participants. Furthermore, there were no significant differences between the vignettes where the causal attributions

and emotional reactions of staff were concerned. There are a number of possible explanations to account for these findings. The first is that the results are an accurate reflection of clinical practice in that client characteristics generally do not affect the responses of staff. This would suggest that participants in this study were able to think objectively about challenging behaviour regardless of the gender of the client. However, this explanation does not support the views of Clements, Clare & Ezelle (1995) who emphasise how the attribution process is likely to be affected by ascribed gender roles, nor the findings of Scotti, Evans, Meyer & Walker's research (1991) where the treatment of problem behaviour varied according to the gender of the client.

A second explanation is that the sample size was not adequate, particularly to detect any interactions that may exist between the gender of the participant and the gender of the vignette. The study would therefore have been improved if twice as many respondents were involved so that each group consisted of 64 participants (as was calculated using the guidelines provided by Cohen, 1988; 1992) rather than 32. Unfortunately, given the constraints of the dissertation, it was not possible to undertake a study of this size.

A third explanation for the non-significant findings is that vignettes of artificial scenarios are a poor substitute for real life. As Garb (1997) notes, judgements may be biased in clinical situations but unbiased in studies using vignettes because in practice, clinicians '...may collect different information depending on the race, social class, or gender of the clients' (p.100). Accordingly he suggests that even where studies fail to show biased judgements, it cannot be concluded that none exist. It is therefore possible that men and

women with learning disabilities are perceived and responded to differently by members of staff, but that the use of vignettes in this study failed to reveal such biases.

A final explanation is that very few gender differences between vignettes were detected because of the tendency of services to be gender-blind. As Scior (1998) notes, ‘...individuals are placed in a position of invisibility with regard to their gender, race and class’ (p.1) because the most salient aspect of their identity is their learning disability. Furthermore as Burns (1998) found, very little attention has been paid to gender issues and sex differences in the field of challenging behaviour even though these issues are likely to be important in enhancing our understanding of such behaviour. Instead, gender is only recognised in negative terms, such as in the case of sexual abuse and unwanted pregnancy (Burns, 1993b). It is possible therefore that in this study, participants tended to respond in the same way to the vignettes, regardless of gender, because of a general lack of awareness that people with learning disabilities are also “real men” and “real women” (Clements, Clare & Ezelle, 1995).

5.2.5 The experience of participants

Previous research has shown that the experience of staff can affect their understanding of challenging behaviour (Hastings, Remington & Hopper, 1995), their emotional reactions (Hastings, 1993; Fallon, 1983; Hastings & Remington 1995) and their intervention behaviour (Oliver, Hall, Hales & Head, 1996; Berryman, Evans & Kalbag, 1994). In this

study, experience was found to effect both the causal attributions and intervention responses of participants.

Where causal attributions were concerned, the longer participants had worked in learning disability services, the less likely they were to cite biomedical factors as contributing to challenging behaviour and the more likely they were to cite stimulation as being important. Where the intervention behaviour of staff was concerned, those with professional/managerial qualifications were more likely to say they would distract the person, use restraint (including medication), prevent harm, implement a management strategy, normalise the individual's lifestyle and improve the quality of the individual's life. In contrast, participants who were unqualified were more likely to say the skills of others were needed. Furthermore, the longer participants had worked in learning disability services, the more emphasise they placed on finding the cause of the behaviour and involving the individual in activities. Finally, those participants who had received training in challenging behaviour again tended to cite finding the causes of the behaviour. It therefore seems that more experienced participants reported using a wider range of interventions and were also more supportive of the behavioural model.

It is interesting however, that there was no significant relationship between experience and the emotional reactions of participants. It may be that a relationship between these variables genuinely did not exist where this sample were concerned. Alternatively, the Emotional Reaction Scale may not have been sensitive enough to detect differences between members of staff according to experience. A third explanation is that there was a

problem with the way in which experience was measured in this study, as only basic indicators were collected. For example, although the criteria for inclusion specified that participants worked with at least one challenging individual, the exact level of challenging behaviour in each unit was not known. Likewise, the specific content of training courses was not considered, nor was the degree to which participants were exposed to challenging behaviours and the form that these behaviours took. However as Hastings, Reed and Watts (1997) note, the extent to which staff are dealing with challenging behaviour on a daily basis may be more important than cumulative experience in the field of learning disabilities. This study would therefore have benefited from more detailed measures of staff experience and training which may have highlighted additional relationships between these variables and the attributions, emotional reactions and intervention strategies of staff.

5.3 Discussion of Findings in Relation to Models of Staff Behaviour

Taken together, these findings can be applied to Weiner's attributional model of helping behaviour (1980, 1986). This model proposes that there is a relationship between causal attributions, emotional reactions and the likelihood of help being offered so that there is an attribution-affect-action ordering. This study revealed that female participants were more supportive of behavioural explanations compared to male participants, where causal attributions of aggressive challenging behaviour were concerned. They were also more likely to emphasise the need to find the causes of the behaviour as an intervention strategy. Thus there appears to be some relationship between the attributions and

intervention responses of female staff. However, as no significant gender differences were found on the Emotional Reactions Scale, the findings are only indirectly supportive of Weiner's model.

Perhaps the results can be more usefully understood in relation to Hastings, Remington & Hatton's model (1995). This suggests that staff responses to challenging behaviour are likely to be influenced by a range of factors in addition to their attributions and emotions. In particular, the characteristics of staff are seen as having an important bearing in their overall performance in learning disability services and a dynamic relationship is thought to exist between staff and clients. The finding that male and female participants differed in relation to their causal attributions and intervention behaviour and to a lesser extent, that the gender of the vignettes had some effect on the proposed intervention responses, highlights the importance of characteristics such as gender and the interaction between staff and clients.

5.4 Criticisms of the Research Design and Suggestions for Improvement

A number of the criticisms of the research design have already been discussed. In particular, the study would have benefited from a larger sample size and more detailed measures of participants' experience and training. There is also a question as to how useful vignettes are as a substitute for clinical practice. The findings should also be considered in relation to a number of other problems.

The first is that due to the nature of the Staff Intervention Questionnaire it was necessary to carry out multiple testing on the data to determine if any of the gender differences were significant. This increased the chances of obtaining Type 1 or false positive errors. The findings of this study should therefore be interpreted with some caution especially where the significance level was between 0.01 and 0.05. Ideally, the research could be replicated in the future to either confirm or disconfirm the significant gender differences. Alternatively, a standardised version of the Staff Intervention Questionnaire could be developed which could then be analysed using factorial ANOVAs in the same way that the CHABA was. For the purpose of investigating gender differences, this might consist of a small number of sub-scales to measure the extent to which staff members might prevent or control the challenging behaviour or intervene in a more gentle and calming manner.

A second problem was the design of the Emotional Reactions Scale where participants were asked to indicate whether they were thinking of a male, female or both male and female clients when completing the questionnaire. Unfortunately, this resulted in very unequal cell sizes so that it was not possible to carry out a factorial ANOVA on the data. This problem may have been avoided if more participants were included so that approximately equal numbers for each cell could have been selected at random from the larger pool of data. Alternatively, it might have been possible to adapt the scale so that it was based on clinical vignettes, in the same way that the CHABA and Staff Intervention

Questionnaire were. However, this may have affected the validity and reliability of its properties.

A third problem is the extent to which the sample was representative of staff who work in learning disability services with challenging individuals. Overall, when the demographic details of the participants in this study were compared to the samples used in previous research (Hastings 1996; 1997b; Mitchell & Hastings, 1998), the findings were broadly consistent. However, 28% of the participants were recruited from a challenging diploma course and as a sub-sample, these individuals had worked longer in learning disability services, were more qualified and had experience of working in more diverse settings. A question exists therefore, as to how well the findings of this research can be generalised to other staff populations. Ideally the respondents should have been recruited solely from residential homes and day centres in order to overcome this problem but time constraints meant that it was necessary to utilise a more accessible pool of participants. It would therefore be interesting to replicate this research on a less experienced/qualified population.

A final criticism relates to the fact that where the intervention behaviour of staff was concerned, many of the significant differences were based on the tendency for female participants to say they were more likely to use certain strategies in comparison to male participants. Therefore these findings may be an artefact of the questionnaire design, whereby female participants tended to write more in response to each question. It is not known whether these self-reported gender differences would translate into real life

differences in clinical practice. As Hastings & Remington (1994a) note there appears to be some discrepancy between the findings of self report and observational research whereby the former suggest that staff are likely to make some response to challenging behaviour and the latter suggest that staff are likely to make no response. This may be due to the questions that are asked in self report studies which encourage staff to refer to past situations in which they actively responded. Consequently, Hastings (1997a) has suggested that studies which use vignettes to determine staff intervention behaviour are really studies of staff intervention beliefs. Therefore, the gender differences found in this research should more accurately be interpreted as differences between male and female participants in terms of their beliefs about interventions.

5.5 Ideas for Further Research

5.5.1 The need for further self-report research

Despite the possible limitations of self-report studies as discussed above, they still provide a useful first step in exploring issues by collecting a large amount of data in a short period of time (Hastings, 1996). Many possibilities for further investigations exist. As well as gender having an impact on staff perceptions and responses to aggressive challenging behaviour, other topographies of behaviour could be examined to see if the same results can be replicated. Other variables in addition to gender may also be important. For example, age, level of learning disability, class, race and environment (such as in schools and in family homes) may all have a bearing on the responses of care

givers. Furthermore, it is important to consider that people with learning disabilities are not necessarily a homogeneous group and it is not known to what extent compounded inequalities may be created by differences such as gender, race, age and class (Williams, 1992). It has also been noted that studies which present data on gender or race, may not reach the same conclusions as those based on both gender and race (Carmen, Russo & Miller, 1981). Future research could therefore look at particular combinations of staff and client characteristics to enhance our understanding of challenging behaviour. Finally, this study has highlighted the possibility that staff understanding of and responses to the behaviour of clients may be influenced by their own experiences as parents. This relationship could initially be explored by comparing the responses of staff who have children with those who do not.

5.5.2 The need for further observational research

Given the possible discrepancy between the findings of self report studies and observational studies, Hastings (1997a) has recommended the need for research to compare the two methodologies, which may also include longitudinal designs. This recommendation is relevant to the findings of this research where further studies could usefully take gender into account. It would be very interesting to see if the same gender differences found on the Staff Intervention Questionnaire could be replicated in an observational study of aggressive challenging behaviour. At the same time, it may also be possible to devise some way of measuring the causal attributions and emotional reactions of staff based on real life incidents, rather than relying on vignettes or the memories of

participants. Such research would probably be of an in-depth nature, focusing on a limited number of challenging behaviour incidents and may require a qualitative methodology.

5.6 Implications for Clinical Practice

The findings of this study and the general research that has been carried out to date on the attributions, emotional reactions and intervention behaviour of staff, has some important clinical implications.

To begin with, it may be possible to develop more informed interventions by taking the attributions and emotional reactions of staff into account as part of a functional analysis (Dagnan, Trower & Smith, 1998). Clinical psychologists should ensure that the attributions of care staff are consistent with their formulation of an individual's challenging behaviour before commencing a treatment plan (Hastings, Reed & Watts, 1997). This study suggests that female staff in particular may be more supportive of the behavioural model and if this is the case, special attention should be paid to the attributions and intervention beliefs of male members of staff. It may also be important to give additional input to inexperienced members of staff when designing a program, as they may have a different understanding of the causes of the challenging behaviour and the most appropriate intervention strategy.

More generally, clinical psychologists should have an awareness of the roles and expectations within learning disability services which may influence the intervention

behaviour of male and female members of staff. Some of the findings of this research could be interpreted to suggest that female staff are more likely to adopt a calming, gentle approach whereas male staff are expected to manage and control the challenging behaviour. This may be problematic where an intervention plan depends upon a consistent approach across an entire staff team.

Although no significant gender differences were found in this study where the emotional reactions of participants were concerned, the findings suggest that challenging behaviour is experienced by many as an aversive event. Hastings (1995) has recommended that intervention programs should encompass ways of dealing with the emotional reactions of staff, especially if there is likely to be an extinction burst of the behaviour in the short term. This might include anger/anxiety management and group or individual counselling to help staff to cope with their negative reactions to challenging behaviours. Clinical psychologists should therefore consider these issues in their work with staff teams around challenging individuals.

Research of this kind is also applicable to staff training programs. For example, Hastings, Reed & Watts (1997) have suggested that training may focus on changing the attributions of care staff or strengthening the link between their attributions and behaviour. This may involve exploring the emotional reactions of staff and how they influence the way in which they intervene. By making these unconscious processes conscious, staff may have more control over their own behaviour (Hastings, Reed & Watts, 1997). Furthermore, as the male participants in this study had received more training in challenging behaviour

even though they had not worked longer in learning disability services, managers may need to think of ways of helping female members of staff to access training opportunities.

Special consideration also needs to be given to the way in which the gender of a client affects the services they receive. This research tentatively suggested that challenging behaviour in a male client may be taken more seriously than the same behaviour in a female client and consequently, male clients may receive a more comprehensive input. There was also a suggestion that men and women with learning disabilities are seen by staff as being genderless, with the danger that their real needs are misunderstood and ignored. It therefore seems very important that a routine audit should be carried out in all learning disability services to ensure that the differing needs of men and women are being met and whether any biases exist in terms of the nature of help and support that is offered. Clinical psychologists should also endeavour to raise awareness of gender issues in their every day clinical work.

Finally, this study has demonstrated that the gender of both staff and clients are important in determining how challenging behaviour is perceived and responded to within services. It is hoped that this research will act as a starting point to enable more investigations to be made. Ultimately, the more that is known about the factors which influence the development and course of challenging behaviour, the more clinicians can do to alleviate this distressing and troublesome problem. It appears that gender may well be one important consideration in this process.

6. REFERENCES

- Ajzen, I. & Fishbein, M. (1977). Attitude-behaviour relations: a theoretical analysis and review of empirical research. Psychological Bulletin, 84, 888-918.
- Beail, N. (1985). The nature of interactions between nursing staff and profoundly handicapped children. Child: Care, Health and Development, 11, 113-129.
- Berryman, J., Evans, I.M., & Kalbag, A. (1994). The effects of training in nonaversive behaviour management on the attitudes and understanding of direct care staff. Journal of Behaviour Therapy and Experimental Psychiatry, 25, 241-250.
- Bird, F. Does, P.A., Moniz, D. & Robinson, J. (1989). Reducing severe aggressive and self-injurious behaviours with functional communication training. American Journal on Mental Retardation, 94, 37-48.
- Bromley, J. & Emerson, E. (1993). Rising to the Challenge? A Survey of Needs and Service Responses to People with Learning Disabilities and Challenging Behaviours in Rochdale. University of Manchester, Manchester: Hester Adrian Research Centre.
- Bromley, J. & Emerson, E. (1995). Beliefs and emotional reactions of care staff working with people with challenging behaviour. Journal of Intellectual Disability Research, 39 (4), 341-352.

Broverman, I.K., Broverman, D.M., Clarkson, F.E., Rosenkrantz, P.S. & Vogel, S.R. (1970). Sex role stereotypes and clinical judgements of mental health. Journal of Consulting and Clinical Psychology, 34, (1), 1-7.

Brown, H. (1996). Ordinary women: Issues for women with learning disabilities. A keynote review. British Journal of Learning Disabilities, 24, 47-51.

Bruininks, R.H., Hill, B.K. & Morreau, L.E. (1988). Prevalence and implications of maladaptive behaviours and dual diagnosis in residential and other service programmes. In J.A. Stark, F.J. Menolascino, M.H. Albarelli & V.C. Gray (Eds), Mental Retardation and Mental Health: Classification, Diagnosis, Treatment, Services. Berlin: Springer-Verlag.

Burns, J. (1998). Challenging Behaviour. Challenging Beliefs. Paper presented at the Division of Clinical Psychology Annual Conference. March. The Brighton Centre: Brighton.

Burns, J. (1993a). Power, care, control and challenging behaviour. Clinical Psychology Forum, 54, 13-16.

Burns, J. (1993b). Invisible women - women who have learning disabilities. The Psychologist: Bulletin of the British Psychological Society, 6, 102-105.

Caplan, P. (1988). The Cultural Construction of Sexuality. London: Tavistock.

Carmen, E.H., Russo, N.F. & Miller, J.B. (1981). Inequality and women's mental health: An overview. American Journal of Psychiatry, 138, (10), 1319-1330.

Carr, J. & Hollins, S. (1995). Menopause in women with learning disabilities. Journal of Intellectual Disability Research, 39, (2), 137-139.

Carr, E.G., Taylor, J.C. & Robinson, S. (1991). The effects of severe behaviour problems in children on the teaching behaviour of adults. Journal of Applied Behaviour Analysis, 24, 523-535.

Clements, J. (1997). Challenging Needs and Problematic Behaviour. In J. O'Hara & A. Sperlinger (Eds), Adults with Learning Disabilities. A Practical Approach for Health Professionals, pp 81-99. Chichester: John Wiley & Sons.

Clements, J., Clare, I. & Ezelle, L.A. (1995). Real men, real women, real lives? Gender issues in learning disabilities and challenging behaviour. Disability & Society, 10, (4), 425-435.

Cohen, J. (1988). Statistical Power Analysis for the Behavioural Sciences, 2nd ed. London: Lawrence Erlbaum Associates Publishers.

Cohen, J. (1992). A Power Primer. Psychological Bulletin, 112, (1), 155-159.

Cullen, C., Burton, M., Watts, S. & Thomas, M. (1983). A preliminary report on the nature of interactions in a mental-handicap institution. Behaviour Research and Therapy, 21, 579-583.

Dagnan, D., Trower, P., & Smith, R. (1998). Care staff responses to people with learning disabilities and challenging behaviour: A cognitive-emotional analysis. British Journal of Clinical Psychology, 37, 59-68.

Deaux, K. & Emswiller, T. (1974). Explanation for successful performance on sex-linked tasks: What is skill for the male is luck for the female. Journal of Personality and Social Psychology, 29, 80-85.

Derby, K.M., Wacker, D.P., Sasso, G. Steege, M., Northup, J. Cigrand, K. & Asmus, J. (1992). Brief functional assessment techniques to evaluate aberrant behaviour in an outpatient setting: A summary of 79 cases. Journal of Applied Behaviour Analysis, 25, 713-721.

Emerson, E. (1995). Challenging Behaviour: Analysis and Intervention in People with Learning Disabilities. Cambridge: Cambridge University Press.

Emerson, E. (1998). Working with People with Challenging Behaviour. In E. Emerson, C. Hatton, J. Bromley & A. Caine. (Eds), Clinical Psychology and People with Intellectual Disabilities, pp 127-153. Chichester: John Wiley & Sons Ltd.

Emerson, E., Alborz, A., Reeves, D., Mason, H., Swarbrick, R., Kiernan, C. & Mason, L. (1997). The HARC Challenging Behaviour Project Report 2: The Prevalence of Challenging Behaviour. University of Manchester, Manchester: Hester Adrian Research Centre.

Emerson, E., Beasley, F., Offord, G. & Mansell J. (1992). An evaluation of hospital-based specialised housing for people with seriously challenging behaviours. Journal of Intellectual Disability Research, 36, 291-307.

Emerson, E., Cummings, R., Barrett, S., Hughes, H., McCool, C. & Toogood, A. (1988). Challenging behaviour and community services: 2. Who are the people who challenge services? Mental Handicap, 16, 16-19.

Ezelle, L.A., Clare, I. & Clements, J. (1992). Gender issues in challenging behaviour. Community Living, January, 21-22.

Fallon, E. (1983). Helping direct care workers manage self-injurious behaviour. Milieu Therapy, 3, 45-52.

Fenwick, A. (1995). On attribution theory: Challenging behaviour and staff beliefs. Clinical Psychology Forum, 79, 29-32.

Ferster, C.B. & Skinner, B.F. (1957). Schedules of Reinforcement. New York: Appleton-Century-Crofts.

Garb, H.N. (1997). Race bias, social class bias, and gender bias in clinical judgement. Clinical Psychology: Science and Practice, 4, (2), 99-120.

Gekoski, W.L., Johnson, E.A., Knox, V.J. & Evans, K.R. (1984). Sex of target and sex of subject effects on the perception of 25, 45, 65 and 85 year olds. Canadian Journal on Aging, 3, (4), 155 - 164.

Goldberg, P. (1968). Are women prejudicial against women? Transaction, 5, 28-30.

Hall, S. & Oliver, C. (1992). Differential effects of severe self-injurious behaviour on the behaviour of others. Behavioural Psychotherapy, 20, 355-366.

Hauber, F.A. & Bruininks, R.H. (1986). Intrinsic and extrinsic job satisfaction among direct care staff in residential facilities for mentally retarded people. Educational and Psychological Measurement, 46, 95-105.

Hastings, R.P. (1993). A Functional Approach to Care Staff Behaviour. Unpublished PhD thesis, University of Southampton. Cited in Hastings, R.P. & Remington, B. (1995). The emotional dimension of working with challenging behaviours. Clinical Psychology Forum, 79, 11-16.

Hastings, R.P. (1995). Understanding factors that influence staff responses to challenging behaviours: An exploratory interview study. Mental Handicap Research, 8, (4), 296-320.

Hastings, R.P. (1996). Staff strategies and explanations for intervening with challenging behaviours. Journal of Intellectual Disability Research, 40, (2), 166-175.

Hastings, R.P. (1997a). Staff beliefs about the challenging behaviours of children and adults with mental retardation. Clinical Psychology Review, 17, (7), 775-790.

Hastings, R.P. (1997b). Measuring staff perceptions of challenging behaviour: The challenging behaviour attributions scale (CHABA). Journal of Intellectual Disability Research, 41, (6), 495-501.

Hastings, R.P., Reed, T.S. & Watts, M.J. (1997). Community staff causal attributions about challenging behaviours in people with intellectual disabilities. Journal of Applied Research in Intellectual Disabilities, 10, (3), 238-249.

Hastings, R.P. & Remington, B. (1994a). Staff behaviour and its implications for people with learning disabilities and challenging behaviours. British Journal of Clinical Psychology, 33, 423-438.

Hastings, R.P. & Remington, B. (1994b). Rules of Engagement: Toward an analysis of staff responses to challenging behaviour. Research in Developmental Disabilities, 15, (4), 279-298.

Hastings, R.P. & Remington, B. (1995). The emotional dimension of working with challenging behaviours. Clinical Psychology Forum, 79, 11-16.

Hastings, R.P., Remington, B. & Hatton, C. (1995). Future directions for research on staff performance in services for people with learning disabilities. Mental Handicap Research, 8, (4), 333-339.

Hastings, R.P., Remington, B. & Hopper, G.M. (1995). Experienced and inexperienced health care worker' beliefs about challenging behaviours. Journal of Intellectual Disability Research, 39, (6), 474-483.

Hatton, C., Brown, R., Caine, A. & Emerson, E. (1995). Stressors, coping strategies and stress-related outcomes among direct care staff in staffed houses for people with learning disabilities. Mental Handicap Research, 8, (4), 252-271.

- Hatton, C., & Emerson, E. (1995). The development of a shortened 'Ways of Coping' questionnaire for use with direct care staff in learning disability services. Mental Handicap Research, 8, 237-251.
- Heider, F. (1958). The Psychology of Interpersonal Relations. New York: Wiley.
- Hile, M.G. & Walbran, B.B. (1991). Observing staff resident interactions: What staff do, what residents receive. Mental Retardation, 29, 35-41.
- Hill, B.K. & Bruininks, R.H. (1984). Maladaptive behaviour of mentally retarded individuals in residential facilities. American Journal of Mental Deficiency, 88, 380-387.
- Intagliata, J., Rinck, C. & Calkins, C. (1986). Staff response to maladaptive behaviour in public and community residential facilities. Mental Retardation, 24, 93-98.
- Jones, R.S.P. & Eayrs, C.B. (1993). Challenging behaviour and intellectual disabilities: An overview. In R.S.P. Jones & C.B. Eayrs (Eds), Challenging Behaviour and Intellectual Disability: A Psychological Perspective, pp 1-11. Kidderminster: BILD Publications.
- Jones, R.S.P, Wint, D. & Ellis, N.C. (1990). The social effects of stereotyped behaviour. Journal of Mental Deficiency Research, 34, 261-268.

Jordanova, L.J. (1989). Sexual Visions: Images of Gender in Science and Medicine between the Eighteenth and Twentieth Century. Hemel Hempstead: Harvester Wheatsheaf.

Kelley, H.H. (1973). The process of causal attribution. American Psychologist, 28, 107-128.

Kogan, N. (1979). Beliefs, attitudes and stereotypes about old people: A new look at some old issues. Research on Aging, 1, 11-36.

Lowe, K., Felce, D. & Blackman, D. (1995). People with learning disabilities and challenging behaviour: the characteristics of those referred and those not referred to specialist teams. Psychological Medicine, 25, 595-603.

Michael, J. (1982). Distinguishing between discriminative and motivational functions of stimuli. Journal of the Experimental Analysis of Behaviour, 37, 149-155.

Mitchell & Hastings (1998). Learning disability care staff's emotional reactions to aggressive challenging behaviours: Development of a measurement tool. British Journal of Clinical Psychology, 37, 441-449.

Moore, B. & Grant, G.W.B. (1976). On the nature and incidence of staff patient interactions in hospitals for the mentally handicapped. International Journal of Nursing Studies, 13, 69-81.

Nieva, V.F. & Gutek, B.A. (1981). Sex effects in evaluation. The Academy of Management Review, 5, 267-276.

Oliver, C., Hall, S., Hales, J. & Head, D. (1996). Self-injurious behaviour and people with intellectual disabilities: Assessing the behavioural knowledge and causal explanations of care staff. Journal of Applied Research in Intellectual Disabilities, 9, (3), 229-239.

Paton, X. & Stirling, E. (1974). Frequency and type of dyadic nurse-patient verbal interactions in a mental subnormality hospital. International Journal of Nursing Studies, 11, 135-145.

Perkins, R. (1992). The challenger and challenged. Paper presented at a workshop: Gender Issues and Challenging Behaviour: Perspectives on Service Provision for People with Learning Difficulties. April. South Bank Polytechnic Conference Centre: Clapham Common.

Perkins, R. & Rowland, L.A. (1991). Sex differences in service usage in long-term psychiatric care. Are women adequately served? British Journal of Psychiatry, 158 (10), 75-79.

Qureshi, H. & Alborz, A. (1992). The epidemiology of challenging behaviour. Mental Handicap Research, 5, 130-145.

Rusch, R.G., Hall, J.C. & Griffin, H.C. (1986). Abuse-provoking characteristics of institutionalized mentally retarded individuals. American Journal of Mental Deficiency, 90, 618-624.

Schonfield, D. (1982). Who is stereotyping whom and why? The Gerontologist, 22, (3), 267-272.

Scior, K. (1998). Women with Learning Disabilities: Gendered subjects after all? Unpublished manuscript of a paper presented at the Division of Clinical Psychology Annual Conference. March. The Brighton Centre: Brighton.

Scotti, J.R., Evans, I.M., Meyer, L.H. & Walker, P. (1991). A meta-analysis of intervention research with problem behaviour: Treatment validity and standards of practice. American Journal on Mental Retardation, 96, (3), 233-256.

Sherman, B.R. (1988). Predictors of the decision to place developmentally disabled family members in residential care. American Journal on Mental Retardation, 92, 344-351.

Watts, M.J., Reed, T.S. and Hastings, R.P. (1997). Staff strategies and explanations for intervening with challenging behaviours: a replication in a community sample. Journal of Intellectual Disability Research, 41, (3), 258-263.

Wahler, R.G. & Fox, J.J. (1981). Setting events in applied behavioural analysis: Towards a conceptual and methodological expansion. Journal of Applied Behavioural Analysis, 14, 327-338.

Weiner, B (1980). A cognitive (attribution)-emotion-action model of helping behaviour: An analysis of judgements of help giving. Journal of Personality and Social Psychology, 39, 1142-1162.

Weiner, B. (1986). An Attributional Theory of Motivation and Emotion. Berlin: Springer-Verlag.

Whitley, B.E., McHugh, M.C., & Frieze, I.H. (1986). Assessing the theoretical models of sex differences in causal attribution. In J.S. Hyde & M.C. Linn (Eds), The Psychology of Gender: Advances through Meta Analysis. Baltimore: John Hopkins University Press.

Williams, F. (1992). Women with learning difficulties are women too. In M. Langan & L. Day (Eds), Women, Oppression and Social Work. Issues in Anti-discriminatory Practice, pp 149-168. Routledge. London.

Appendix

- I. Letter asking for permission to use the questionnaires and reply
- II. Copies of questionnaires - male and female vignettes
- III. Copies of information sheets
- IV. Letters giving ethical approval / exemption
- V. Written summary of research given to managers
- VI. Normal distribution graphs - attributions
- VII. Normal distribution graphs - emotions

Appendix I. Letter asking for permission to use the questionnaires and reply



Salomons

Centre for Applied Social & Psychological Development

Dr.
Department of Psychology
University

19th July 1998

Dear Dr.

Re: Dissertation: Gender and Challenging Behaviour

You may recall that I contacted you a few months ago regarding my dissertation. The information that you sent me was most useful and I have now completed my research proposal, which has been passed by the examiners on the Salomons course. I have enclosed a copy of this proposal for your information.

As you can see, I am hoping to compare the reactions of male and female members of staff to the aggressive behaviour of either a male or female client, as described in vignettes. In order to do this I would like to use the 'Challenging Behaviour Attributions Scale', the 'Staff Intervention Questionnaire' and the 'Emotional Reactions Scale'. I would therefore be grateful for your permission to use these tools.

Furthermore, I already have a copy of the 'Challenging Behaviour Attributions Scale' which you previously sent me. However, I do not have a copy of the 'Emotional Reactions Scale', nor the questionnaire design that you used to measure staff intervention strategies. If you could send me these measures, along with any explanatory letters / instructions and directions for scoring and analysing the data, this would be extremely helpful.

Please do not hesitate to contact me if you have any queries or if you require further information. I will look forward to hearing from you.

With very best wishes.

Yours sincerely,

Alison Spencer,
Clinical Psychologist in training.

Alvan

Motions scale as requested, plus

Slightly changed update on CHABA.

Copy of q'nnaire section on intervention also enclosed.

A Masters Student has used something similar recently.

The responses were coded on a 3 point scale

With compliments representing increasing severity (e.g. nothing → talk → ^{restrain} _{Ag}).

I would suggest developing some kind of similar coding so that things can be dealt with easier in state tests later

Appendix II. Copies of questionnaires - male and female vignettes

INSTRUCTIONS

Please answer the following questions as honestly as possible and complete the questionnaire on your own without discussing your answers with colleagues.

There are no right or wrong answers and all the information is confidential and anonymous.

Please do not write your name on the questionnaire.

Thank you for taking the time to participate in this project.

SECTION A

Please read the following brief description:

Mark is a young man who has severe learning disabilities (mental handicap). Sometimes, Mark is aggressive towards the people who care for him and live with him. He will kick and punch people, pull their hair, and physically push them (sometimes so forcefully that people fall to the ground).

Consider how likely it is that the following statements are reasons for Mark behaving in the way described above. You have been given very little information compared to that you might have if you worked with Mark. Therefore, simply think about the most likely reasons for someone like Mark behaving in this way.

Please give your response to each of the possible reasons and use the scales below each reason to indicate your opinion. The key shows what the points on the scales mean:

VUL = very unlikely
UL = unlikely
E = equally likely/unlikely
L = likely
VL = very likely

Please indicate your response by **placing a circle** around the appropriate point on the scale.

1. **Because he is given things to do that are too difficult for him**

VUL UL E L VL
2. **Because he is physically ill**

VUL UL E L VL
3. **Because he does not like bright lights**

VUL UL E L VL
4. **Because he is tired**

VUL UL E L VL
5. **Because he cannot cope with high levels of stress**

VUL UL E L VL

6. **Because his house is too crowded with people**
VUL UL E L VL
7. **Because he is bored**
VUL UL E L VL
8. **Because of the medication that he is given**
VUL UL E L VL
9. **Because he is unhappy**
VUL UL E L VL
10. **Because he has not got something that he wanted**
VUL UL E L VL
11. **Because he lives in unpleasant surroundings**
VUL UL E L VL
12. **Because he enjoys it**
VUL UL E L VL
13. **Because he is in a bad mood**
VUL UL E L VL
14. **Because high humidity makes him uncomfortable**
VUL UL E L VL
15. **Because he is worried about something**
VUL UL E L VL
16. **Because of some biological process in his body**
VUL UL E L VL
17. **Because his surroundings are too warm/cold**
VUL UL E L VL

18. **Because he wants something**
VUL UL E L VL
19. **Because he is angry**
VUL UL E L VL
20. **Because there is nothing else for him to do**
VUL UL E L VL
21. **Because he lives in a noisy place**
VUL UL E L VL
22. **Because he feels let down by somebody**
VUL UL E L VL
23. **Because he is physically disabled**
VUL UL E L VL
24. **Because there is not very much space in his house to move around in**
VUL UL E L VL
25. **Because he gets left on his own**
VUL UL E L VL
26. **Because he is hungry or thirsty**
VUL UL E L VL
27. **Because he is frightened**
VUL UL E L VL
28. **Because somebody he dislikes is nearby**
VUL UL E L VL
29. **Because people do not talk to him very much**
VUL UL E L VL

30. **Because he wants to avoid uninteresting tasks**
VUL UL E L VL
31. **Because he does not go outdoors very much**
VUL UL E L VL
32. **Because he is rarely given activities to do**
VUL UL E L VL
33. **Because he wants attention from other people**
VUL UL E L VL

SECTION B

The following questions are about what you would do about Mark if you saw him behaving in the way described at the beginning of the questionnaire.

Please write your answer in the spaces provided. Write as much as you can and answer the question about **why** you would do whatever you describe.

1. **If you saw Mark behaving in the way described at the beginning of the questionnaire, what would you do there and then ?**
2. **Why would you do what you have described ?**

3. **How certain are you that the ways of dealing with Mark there and then that you have described above, would be the best thing to do ?**

Please circle the number on the scale that best reflects your view

1	2	3	4	5	6	7
Very Certain	Certain	Fairly Certain	Equally Certain / Uncertain	Fairly Uncertain	Uncertain	Very Uncertain

4. **What would you do in the longer term ?**

5. **Why would you do what you have described ?**

6. **How certain are you that the ways of dealing with Mark in the longer term that you have described above, would be the best thing to do ?**

1	2	3	4	5	6	7
Very Certain	Certain	Fairly Certain	Equally Certain / Uncertain	Fairly Uncertain	Uncertain	Very Uncertain

SECTION C

Below is a list of emotions that care staff have said that they experience when they have to work with people who display aggressive challenging behaviours. I want to know how **you** typically feel in this situation. Think about your own recent experience of aggressive behaviours displayed by the clients that you work with. Consider each of the emotional reactions, and select the response next to each item that best describes how you feel when working with people who display challenging behaviour.

	No, never	Yes, but infrequently	Yes, frequently	Yes, very frequently
Shocked	0	1	2	3
Betrayed	0	1	2	3
Guilty	0	1	2	3
Hopeless	0	1	2	3
Afraid	0	1	2	3
Angry	0	1	2	3
Incompetent	0	1	2	3
Sad	0	1	2	3
Frustrated	0	1	2	3
Helpless	0	1	2	3
Disgusted	0	1	2	3
Nervous	0	1	2	3
Resigned	0	1	2	3
Frightened	0	1	2	3
Humiliated	0	1	2	3

Whilst completing this question, who were you thinking about ?

Please tick one of the following

A male client

A female client

Both male and female clients

SECTION D

Finally, please complete the following questions about yourself by ticking the most appropriate response:

1. **Please indicate your gender**

Male

Female

2. **Please indicate your age**

16 - 25
years

26 - 35
years

36 - 45
years

46 - 55
years

56 years
and over

3. **What is your current job title ?**

4. **Where do you work ?**

Residential home

Day Centre

Other (please describe)

5. **Approximately how many clients use the above service ?**

6. **Please indicate the number of years you have worked with people with learning disabilities. If this is less than a year, please indicate the number of months.**

7. Please indicate the extent of your training on challenging behaviour by ticking the most appropriate choice below

☐ No formal training on challenging behaviour

☐ Limited training (one or two short courses only)

☐ A fair amount of training (several courses)

☐ Detailed training (many courses, or coverage on a professional course)

☐ Extensive training (specialism in the management of challenging behaviours or a similar level of training).

THANK YOU VERY MUCH FOR COMPLETING THIS QUESTIONNAIRE

INSTRUCTIONS

Please answer the following questions as honestly as possible and complete the questionnaire on your own without discussing your answers with colleagues.

There are no right or wrong answers and all the information is confidential and anonymous.

Please do not write your name on the questionnaire.

Thank you for taking the time to participate in this project.

SECTION A

Please read the following brief description:

Sheryl is a young women who has severe learning disabilities (mental handicap). Sometimes, Sheryl is aggressive towards the people who care for her and live with her. She will kick and punch people, pull their hair, and physically push them (sometimes so forcefully that people fall to the ground).

Consider how likely it is that the following statements are reasons for Sheryl behaving in the way described above. You have been given very little information compared to that you might have if you worked with Sheryl. Therefore, simply think about the most likely reasons for someone like Sheryl behaving in this way.

Please give your response to each of the possible reasons and use the scales below each reason to indicate your opinion. The key shows what the points on the scales mean:

- VUL = very unlikely
- UL = unlikely
- E = equally likely/unlikely
- L = likely
- VL = very likely

Please indicate your response by **placing a circle** around the appropriate point on the scale.

1. Because she is given things to do that are too difficult for her

VUL UL E L VL

2. Because she is physically ill

VUL UL E L VL

3. Because she does not like bright lights

VUL UL E L VL

4. Because she is tired

VUL UL E L VL

5. Because she cannot cope with high levels of stress

VUL UL E L VL

6. **Because her house is too crowded with people**
VUL UL E L VL
7. **Because she is bored**
VUL UL E L VL
8. **Because of the medication that she is given**
VUL UL E L VL
9. **Because she is unhappy**
VUL UL E L VL
10. **Because she has not got something that she wanted**
VUL UL E L VL
11. **Because she lives in unpleasant surroundings**
VUL UL E L VL
12. **Because she enjoys it**
VUL UL E L VL
13. **Because she is in a bad mood**
VUL UL E L VL
14. **Because high humidity makes her uncomfortable**
VUL UL E L VL
15. **Because she is worried about something**
VUL UL E L VL
16. **Because of some biological process in her body**
VUL UL E L VL
17. **Because her surroundings are too warm/cold**
VUL UL E L VL

18. **Because she wants something**
VUL UL E L VL
19. **Because she is angry**
VUL UL E L VL
20. **Because there is nothing else for her to do**
VUL UL E L VL
21. **Because she lives in a noisy place**
VUL UL E L VL
22. **Because she feels let down by somebody**
VUL UL E L VL
23. **Because she is physically disabled**
VUL UL E L VL
24. **Because there is not very much space in her house to move around in**
VUL UL E L VL
25. **Because she gets left on her own**
VUL UL E L VL
26. **Because she is hungry or thirsty**
VUL UL E L VL
27. **Because she is frightened**
VUL UL E L VL
28. **Because somebody she dislikes is nearby**
VUL UL E L VL
29. **Because people do not talk to her very much**
VUL UL E L VL

30.

Because she wants to avoid uninteresting tasks

VULULELVL
31.

Because she does not go outdoors very much

VULULELVL
32.

Because she is rarely given activities to do

VULULELVL
33.

Because she wants attention from other people

VULULELVL

SECTION B

The following questions are about what you would do about Sheryl if you saw her behaving in the way described at the beginning of the questionnaire.

Please write your answer in the spaces provided. Write as much as you can and answer the question about **why** you would do whatever you describe.

1.

If you saw Sheryl behaving in the way described at the beginning of the questionnaire, what would you do there and then ?
2.

Why would you do what you have described ?

3. **How certain are you that the ways of dealing with Sheryl there and then that you have described above, would be the best thing to do ?**

Please circle the number on the scale that best reflects your view

1	2	3	4	5	6	7
Very Certain	Certain	Fairly Certain	Equally Certain / Uncertain	Fairly Uncertain	Uncertain	Very Uncertain

4. **What would you do in the longer term ?**

5. **Why would you do what you have described ?**

6. **How certain are you that the ways of dealing with Sheryl in the longer term that you have described above, would be the best thing to do ?**

1	2	3	4	5	6	7
Very Certain	Certain	Fairly Certain	Equally Certain / Uncertain	Fairly Uncertain	Uncertain	Very Uncertain

SECTION C

Below is a list of emotions that care staff have said that they experience when they have to work with people who display aggressive challenging behaviours. I want to know how **you** typically feel in this situation. Think about your own recent experience of aggressive behaviours displayed by the clients that you work with. Consider each of the emotional reactions, and select the response next to each item that best describes how you feel when working with people who display challenging behaviour.

	No, never	Yes, but infrequently	Yes, frequently	Yes, very frequently
Shocked	0	1	2	3
Betrayed	0	1	2	3
Guilty	0	1	2	3
Hopeless	0	1	2	3
Afraid	0	1	2	3
Angry	0	1	2	3
Incompetent	0	1	2	3
Sad	0	1	2	3
Frustrated	0	1	2	3
Helpless	0	1	2	3
Disgusted	0	1	2	3
Nervous	0	1	2	3
Resigned	0	1	2	3
Frightened	0	1	2	3
Humiliated	0	1	2	3

Whilst completing this question, who were you thinking about ?

Please tick one of the following

A male client A female client Both male and female clients

SECTION D

Finally, please complete the following questions about yourself by ticking the most appropriate response:

1. Please indicate your gender

Male Female

2. Please indicate your age

16 - 25	26 - 35	36 - 45	46 - 55	56 years
years	years	years	years	and over

3. What is your current job title ?

4. Where do you work ?

Residential home

Day Centre

Other (please describe)

5. Approximately how many clients use the above service ?

6. Please indicate the number of years you have worked with people with learning disabilities. If this is less than a year, please indicate the number of months.

7. Please indicate the extent of your training on challenging behaviour by ticking the most appropriate choice below

No formal training on challenging behaviour

Limited training (one or two short courses only)

A fair amount of training (several courses)

Detailed training (many courses, or coverage on a professional course)

Extensive training (specialism in the management of challenging behaviours or a similar level of training).

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE

Appendix III.

Copies of information sheets



Salomons

Centre for Applied Social & Psychological Development

INFORMATION SHEET

Please read this page before answering any questions

My name is Alison Spencer and I am training to be a Clinical Psychologist at the Salomons Centre. I am carrying out my dissertation on gender and challenging behaviour and I am particularly interested in how members of staff understand, react and respond to clients who are challenging. The project will involve obtaining the responses of both male and female staff to the attached questionnaire. It is hoped that this study will help to inform the work of Clinical Psychologists, by providing a more thorough understanding of how staff cope with clients who are challenging. Ultimately, it is anticipated that research into this area will be of benefit to the clients themselves. I would therefore be very grateful for your participation in this project.

The questionnaire should take approximately 15 minutes to complete. In order to answer some of the questions, it will be necessary to consider an incident of challenging behaviour which may be distressing for some people. This may affect your decision whether or not to take part and your participation is entirely voluntary. If the process of completing the questionnaire raises some issues which you would like to discuss further, I can be contacted on the below telephone number (extension 3041).

Although your managers have given me permission to approach you, they are aware that the decision to take part in this project is entirely your choice. You can also withdraw your consent at any stage. All responses to the questionnaires will be treated in confidence and managers will not be informed who has or has not participated. Secure research codes will be kept separate from the questionnaires to protect the identity of individuals and the original questionnaires will be destroyed once the analysis of data is complete. Managers will not be informed of your direct response to the questionnaire. Instead, an overall summary report of the findings (which will not contain any identifying information) will be sent to participants and managers who request a copy. Eventually, it is hoped that the results will be published in an academic journal, but the findings will be presented in a way as to hide individual responses.

There are two copies of this information sheet. If after reading this page you are happy to participate in the project, please could you sign both copies and keep one for yourself. The other copy and the questionnaire can be returned to me in person or posted to the Salomons centre in the SAE provided. Once received, the information sheet will be kept separate from the questionnaire.

If you have any questions about this project, please do not hesitate to contact me at the above address. Thank you for taking the time to read this page.

I have read and understood the information sheet and I am willing to participate in the research.

Signature _____ Name _____

I would like a copy of the report when the results are available (in the spring/summer of 1999)

Yes

No

Address for those requesting a report

Please return this copy with the questionnaire

David Salomons Estate Broomhill Road Southborough Tunbridge Wells Kent TN3 0TG
Tel +44 (0) 1892 515152 Fax +44 (0) 1892 539102 Web site www.salomons.org.uk

Also at: 14 Warren Yard Warren Farm Office Village Stratford Road Wolverton Mill Milton Keynes MK12 5NW
Tel +44 (0) 1908 225351 Fax +44 (0) 1908 225574

Salomons Centre Ltd Registered Office: North Holmes Road Canterbury Kent CT1 1QU Registered in England No. 3143393

Salomons is part of
Canterbury Christ Church
University College



Salomons

Centre for Applied Social & Psychological Development

INFORMATION SHEET

Please read this page before answering any questions

My name is Alison Spencer and I am training to be a Clinical Psychologist at the Salomons Centre. I am carrying out my dissertation on gender and challenging behaviour and I am particularly interested in how members of staff understand, react and respond to clients who are challenging. The project will involve obtaining the responses of both male and female staff to the attached questionnaire. It is hoped that this study will help to inform the work of Clinical Psychologists, by providing a more thorough understanding of how staff cope with clients who are challenging. Ultimately, it is anticipated that research into this area will be of benefit to the clients themselves. I would therefore be very grateful for your participation in this project.

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Signature _____ Name _____

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Address for those requesting a report

Please keep this copy for your own reference

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Appendix IV. Letters giving ethical approval / exemption

LOCAL RESEARCH ETHICS COMMITTEE

26 November 1998

Ms Alison Spencer
Salomons Centre
David Salomons Estate
Broomhill Road
Southborough
TUNBRIDGE WELLS
Kent TN3 0TG

Dear Ms Spencer

“Gender Effects and Aggressive Challenging Behaviour in People with Learning Disabilities”

I am writing to advise you that the above protocol was discussed by the members of the Local Research Ethics Committee at the meeting on 13 November 1998 and received their full approval.

Yours sincerely

Secretary

LREC

Department of Public Health

Please direct LREC correspondence to

Our Ref: LREC/315

Ms Alison Spencer
Clinical Psychologist in training
Salomons Centre
David Salomon Estate
Broomhill Road
Southborough
Tunbridge Wells
Kent TN3 0TG

16 November 1998

Dear Ms Spencer

Re: Gender effects and aggressive challenging behaviour in people with learning disabilities

Thank you for your letter of the 26 October 1998. I am able to provide provisional ethical approval for this protocol acting on Chairman's Action. This is considered sufficient for work to progress and my decision will be reported back to the full LREC when it next meets on the 19 November 1998 for ratification. You should assume that this decision is ratified unless the Committee raise any further issues in which case I will write again.

I would, however, remind investigators that our approval is conditional. Approval may be withdrawn if the Committee review the study and are concerned about the conduct or consequences of the work. The Committee require that the investigator inform them of any changes to the protocol, or any serious adverse events during the work, and expect to be given a copy of the final research report.

I wish you well in your research endeavours.

Yours sincerely

Local Research and Ethics Committee

Department

Directorate

Fax

**ETHICAL
RESEARCH COMMITTEE**

9th October 1998

Ms A. Spencer
Clinical Psychologist in training
Salomons Centre
David Salomons Estate
Broomhill Road
SOUTHBOROUGH
Tunbridge Wells
Kent TN3 0TG

Dear Ms Spencer

**DISSERTATION RESEARCH PROJECT - GENDER AND CHALLENGING
BEHAVIOUR**

Thank you for your letter of 1st October enclosing information about your research dissertation proposal. Having read the project, I do not believe it requires ethical committee approval.

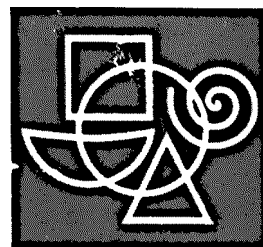
Yours ~~sincerely~~,

**Dr
CHAIRMAN**

Salomons Centre
David Salomons Estate
Broomhill Road, Southborough
TUNBRIDGE WELLS
Kent TN3 0TG

Telephone: 01892 515152
Facsimile: 01892 539102

Our Ref: AL/LT/075/1998/Spencer
Direct Tel: 01892 507665
Direct Fax: 01892 507660
E-mail: t.lavender@salomons.org.uk



SALOMONS
CENTRE

Miss A Spencer

21st September 1998

Dear Alison,

Re: *Ethics Approval – Gender and Challenging Behaviour*

Thank you for your letter dated 18th September enclosing the revised proposal. The Panel note that you have given very good and careful consideration of all the points raised in our letter dated 2nd September 1998 and is pleased to provide full ethical approval for your research project.

We look forward to seeing the results and hope you enjoy the research.

Yours sincerely,

Professor A Lavender
Chair
Ethics Panel

Teaching Fellow

Alison Spencer

04/11/98

Dear Alison

RE: Dissertation Project

Further to our telephone conversations, I am writing to confirm that we have arranged for you to spend some time with the students (36) regarding your questionnaire on 19th November 1998, between 12.00 and 12.30. Please ask for (intake secretary) or (year tutor) on your arrival at the

I am also writing to confirm that it is not necessary to approach the Ethics Committee regarding this research as you will be collecting this information on a voluntary basis.

I wish you success in your research and the Diploma Team would be interested in your findings.

Yours sincerely

Chief Examiner and Diploma Convenor

Appendix V. Written summary of research given to managers



Salomons

Centre for Applied Social & Psychological Development

Summary of Research Project

Gender effects and aggressive challenging behaviour in people with learning disabilities

This research will be carried out as a dissertation for the South Thames Clinical Psychology Training Scheme. The project aims to investigate the impact of gender on staff attributions, emotional reactions and intervention strategies for aggressive challenging behaviour. This will involve asking male and female members of staff in learning disability services to read a fictitious vignette and complete a short questionnaire. Participation in the research is entirely voluntary and the questionnaire should take approximately 15 minutes to complete.

(Consultant Clinical Psychologist) and (Clinical Director) are supporting this research and I have full ethical approval from the Salomons Centre Ethics Panel, which is an independent committee made up of professional representatives in the field. Research and Ethics Committee is also happy for the project to proceed.

If you have any questions about this research, please do not hesitate to contact me at the above address.

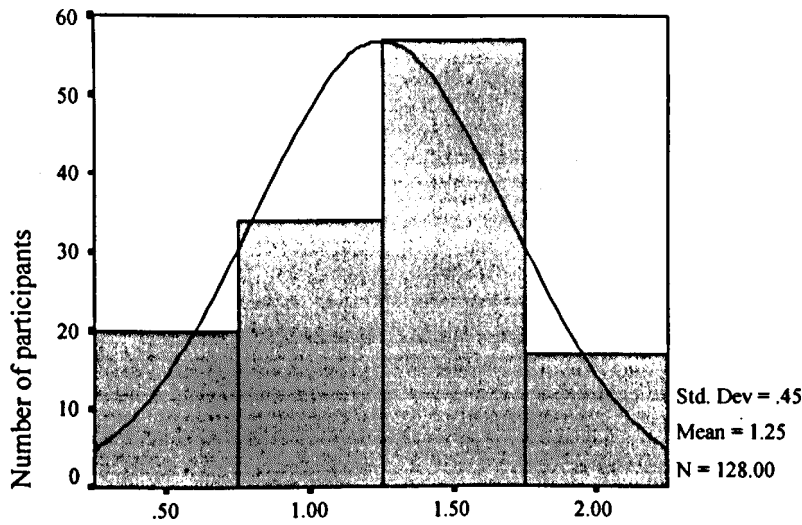
Alison Spencer,
Clinical Psychologist in training.

Appendix VI. Normal distribution graphs - attributions

Normal Distribution Graphs for Participants Scores on the Challenging Behaviour Attributions Scale

Normal Distribution Curve

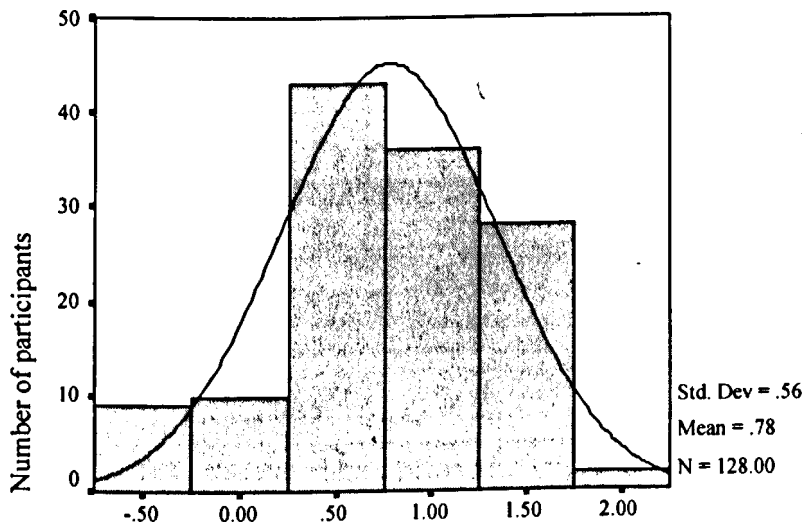
Learned Positive Sub-Scale



Learned positive sub-scale

Normal Distribution Curve

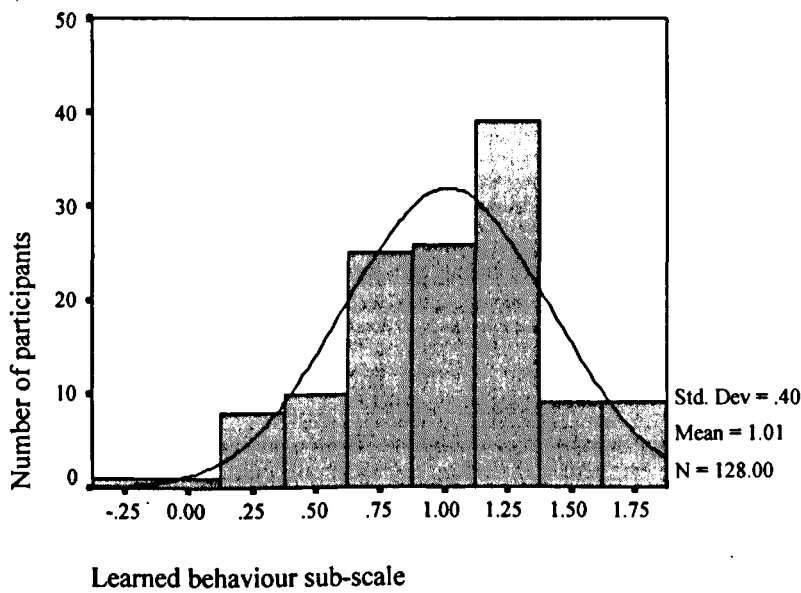
Learned Negative Sub-Scale



Learned negative sub-scale

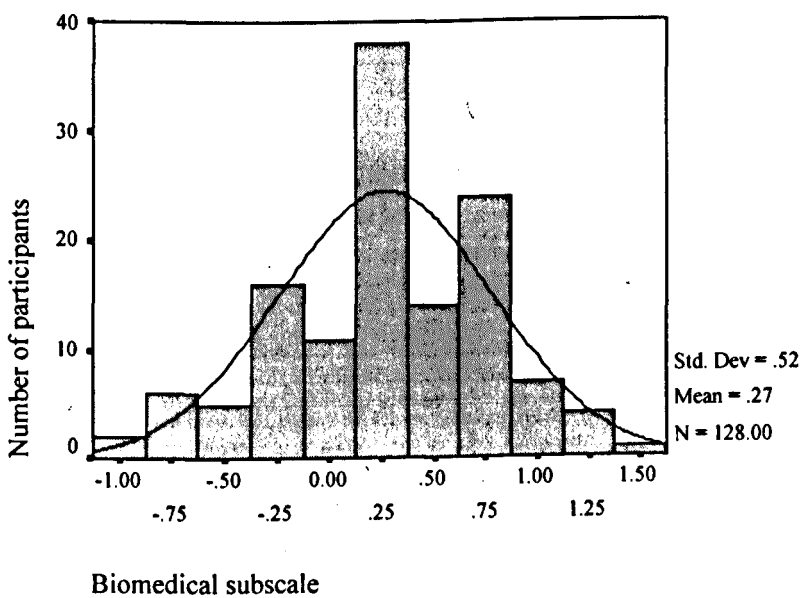
Normal Distribution Curve

Learned Behaviour Sub-Scale



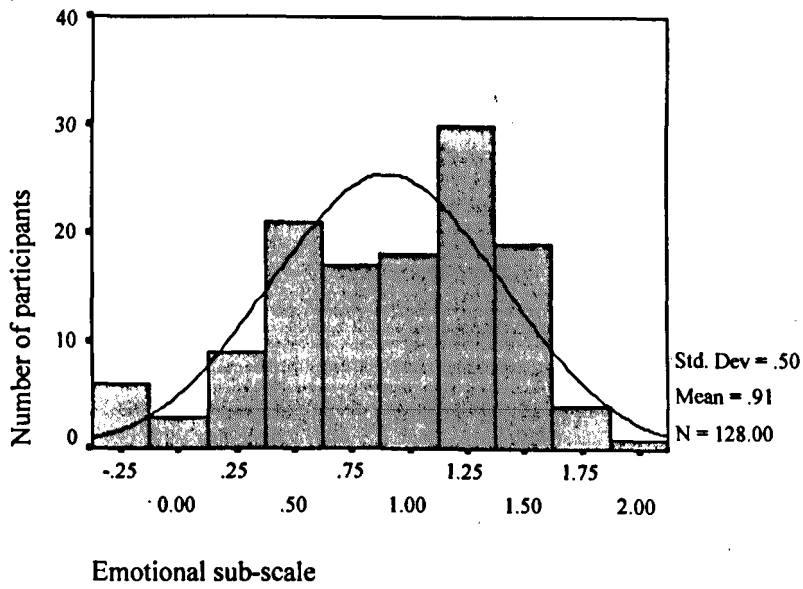
Normal Distribution Curve

Biomedical Sub-Scale



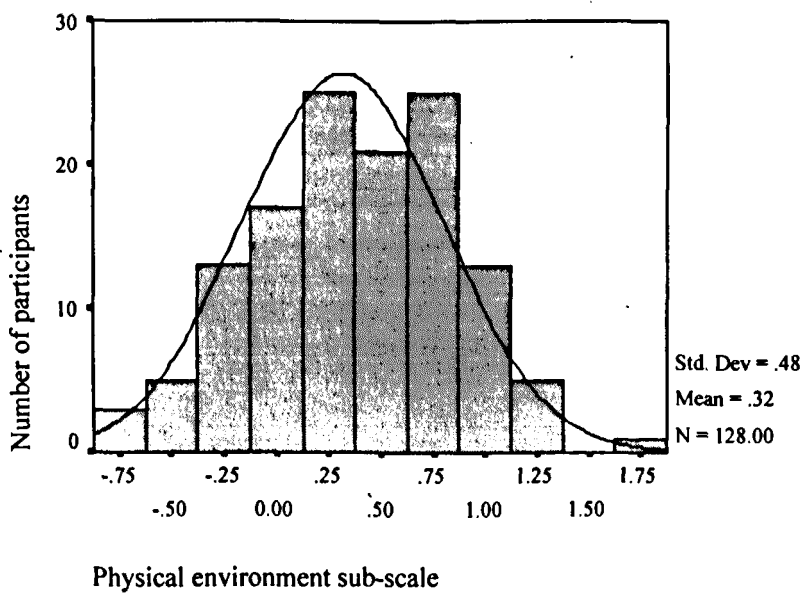
Normal Distribution Curve

Emotional Sub-Scale



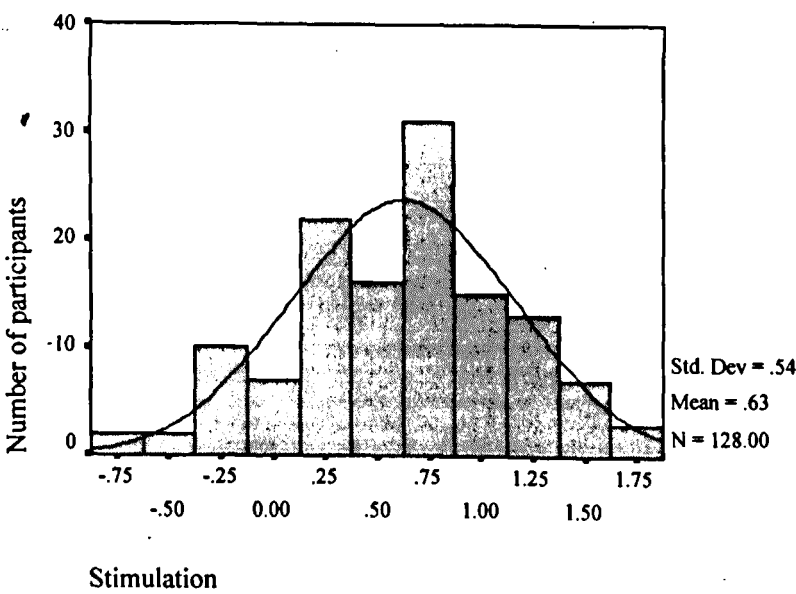
Normal Distribution Curve

Physical Environment Sub-Scale



Normal Distribution Curve

Stimulation Sub-Scale



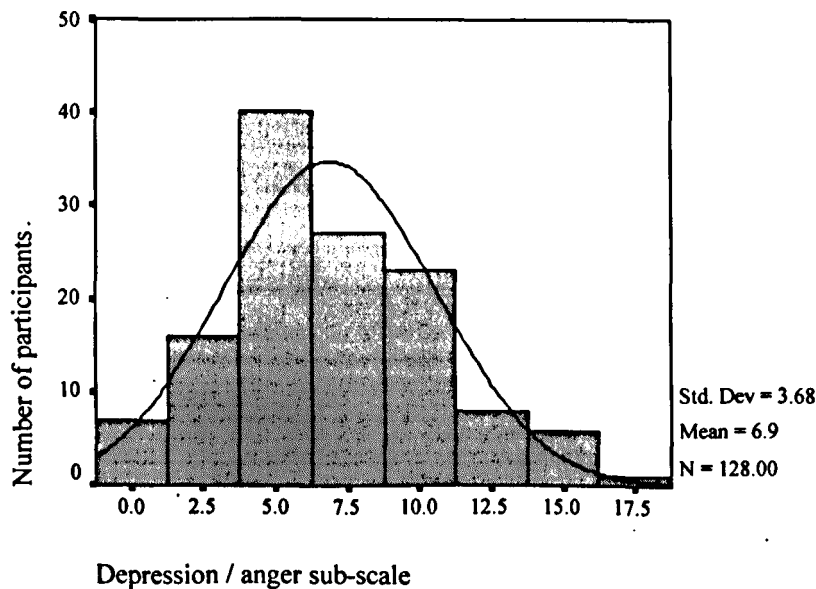
Appendix VII.

Normal distribution graphs - emotions

Normal Distribution Graphs for Participants Scores on the Emotional Reactions Scale

Normal Distribution Curve

Depression / Anger Sub-Scale



Normal Distribution Curve

Fear / Anxiety Sub-Scale

